DOCUMENT RESUME

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ABSTRACT

Compiled are abstracts and indexes to selected print and non-print materials related to wastewater treatment and water quality education and instruction, as well as materials related to pesticides, hazardous wastes, and public participation. Sources of abstracted/indexed materials include all levels of government, private concerns, and educational institutions. Title, author(s), publication date, cross-references, descriptors, and availability are provided for each entry. Also included are procedures to illustrate how instructors and curriculum developers in the water quality control field can locate instructional materials to meet very general or highly specific requirements of their programs. This publication supplements and does not replace "Water Quality Instructional Resources Information System (IRIS): A Compilation of Abstracts to Water Quality and Water Resources" or IRIS Supplements I-XX. (JN)

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Prepared by

Environmental Quality Instructional Resources Center
SMEAC Information Reference Center
The Ohio State University
1200 Chambers Road, Room 310
Columbus, OH 43212

WATER QUALITY INSTRUCTIONAL RESOURCES INFORMATION SYSTEM (IRIS)

A Compilation of Abstracts to Water Quality and Water Resources Materials

Supplement 21 (1985)

April, 1985

SE 045 916

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Robert W. Howe

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

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Preface

This publication contains abstracts and indexes to selected materials related to wastewater treatment and water quality education and instruction. In addition, some materials related to pesticides, hazardous wastes, and public participation are included. Also included are procedures to illustrate how instructors and curriculum developers in the water quality control field can locate instructional materials to meet very general or highly specific requirements in their programs.

Supplements to this publication will be issued periodically.

For further information about these materials contact:

Environmental Quality Instructional Resources Center
1200 Chambers Road, Room 310
Columbus, Ohio 43212

(614) 422-6717

I. General Information about Materials in IRIS.

A. What types of materials are included in IRIS?

The Environmental Quality Instructional Resources Center acquires, reviews, indexes, and announces both print (books, modules, units, etc.) and non-print (films, slides, video tapes, etc.) materials related to water quality and water resources education and instruction.

Materials selected must be available from some source for announcement. When materials are not readily available we attempt to make the materials available through some national information service for easier acquisition. In a few cases the Environmental Quality Instructional Resources Center is the source of the materials.

B. How are materials entered into IRIS?

We request that people assist us in locating materials for the system. If you have materials you believe to be useful to others, please send two copies if possible to the:

Environmental Quality (EQ) Instructional Resources Center
1200 Chambers Road, Room 310
Columbus, Ohio 43212

Materials are reviewed by the project staff. Availability of the materials is checked, and the materials are abstracted and indexed. The abstract describes the contents of the material. The index terms (descriptors) are concepts or terms used to describe the contents and the form of the document. (See the Subject Index for a listing of those that have been used.) The index terms are useful for locating materials manually, such as with this supplement, and also by computer.

When items are processed they are entered on the IRIS (water) computer tape. This tape is maintained by the EQ Instructional Resources Center at The Ohio State University and is used for producing tapes for other information systems, publications, and for computer searches conducted at The Ohio State University.

C. How can a user locate materials in IRIS?

1. All materials placed in IRIS (water) collection.

Materials entered into the IRIS (water) collection can be located in two ways: (1) by manual search of the 1983 compilation and supplements that follow and (2) by computer.

The compilation produced in 1983 includes the original IRIS (1979) and Supplements 1-15. It is available for $75.00.

Quarterly updates of the compilation are available by subscription on a yearly basis. Information regarding an annual subscription to IRIS (water) Quarterly Compilations can be obtained by writing to the EQ Instructional Resources Center. A subscription to the quarterly supplements for 1985 is $12.00 (within the U.S.). Price to Canada and Mexico is $14.00. Prices in other Countries is $18.00. Separate quarterly supplements are $5.00 each.

The compilation and the quarterly supplements can be scanned and the subject index can be used for manual searches.

Computer tapes of the IRIS (water) collection can also be searched. The IRIS tapes are available for searching at The Ohio State University and will again be available for computer searching at other sites in the future.

2. Materials placed in the Educational Resources Information System (ERIC)

A number of the materials processed for the IRIS (water) system are entered into the ERIC system and announced in Resources in Education (RIE). Resources in Education (RIE) is published monthly and is available from:

Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
(202) 783-3238

The current price is listed in the most recent issue of RIE. Check if a college or university library close to you has a copy. If they do not, contact the EQ Instructional Resources Center for assistance.

Many libraries subscribe to RIE. Materials announced in RIE can be searched manually each month by scanning RIE or by checking the index terms in the back of each issue. Materials announced in RIE can be searched by computer also. ERIC computer tapes may be purchased outright, but users can access them through Dialog, BRS, CompuServe and Systems Development Corporation (Orbit). For the address of search services in your state that can search these databases, contact the:

EQ Instructional Resources Center
1200 Chambers Road, Room 310
Columbus, Ohio 43212
(614) 422-6717

Most of the materials announced in RIE are available on microfiche (microfilm) at over 700 sites throughout the United States and the world. Users can view these materials on site at many locations to identify what they believe will be useful to them at no cost. Microfiche copies (or in most cases Xerox copies) can be ordered through the ERIC Document Reproduction Service. The address and order information is in the back of each issue of RIE. Xerox copies of many items related to water quality and resource education and training can also be ordered through the EQ Instructional Resources Center for $0.06 per page plus $1.00 per document.

For information about locations of ERIC microfiche sites in your state, contact the EQ Instructional Resources Center.

A number of journal articles processed for the IRIS (water) system are entered into the ERIC system and announced in Current Index to Journals in Education (CIJE).

Current Index to Journals in Education is published monthly and is available from:

ORYX Press
2214 North Central at Encanto
Phoenix, Arizona 85004
(602) 254-6156

Many libraries subscribe to CIJE. Materials announced in CIJE can be searched manually each month by scanning CIJE or by checking the index terms in the back of each issue. Materials announced in CIJE can be searched by computer also. Refer to the previous discussion of RIE concerning computer searches.

Materials announced in CIJE can be located in journals at many university libraries.

Many of the articles can be obtained from University Microfilms. For prices and further information write to:

UMI Article Reprint Department
300 North Zeeb Road
Ann Arbor, Michigan 48106
(800) 521-0600

II. How to Use the Compilation

A. Description of Information in Resumes

Each resume is listed by EW number in numerical order in the resume section. Two samples of resumes are provided to explain the data fields in the resumes. Sample resume #1 is a sample resume of an item not entered into ERIC. Sample resume #2 is a sample resume of an item entered into ERIC; a few additional data elements are in these resumes and are explained.

1. Sample resume of materials not entered in ERIC

   a. IRIS NUMBER: EW006023
   b. PUBLICATION DATE: FEB 81
   c. TITLE: PROGRAMMED APPROACH TO WATER/MASS ANALYSES.
   d. PERSONAL AUTHOR: SPENCE, GEORGE R., JR.
   e. DESCRIPTOR: *DESIGN; *ENGINEERING; *EQUIPMENT; *MASS BALANCE; *PROJECT DESIGN; *POLLUTION ENGINEERING; *PIPES; *WATER RESOURCES

   f. DESCRIPTIVE NOTE: 30-33P.
   g. ABSTRACT: DURING THE ENGINEERING PHASE OF A PROJECT DESIGN, WATER REQUIREMENTS OFTEN CHANGE AS NEW INFORMATION BECOMES AVAILABLE. THIS ARTICLE DETAILS A PROGRAMMED APPROACH TO CALCULATION OF A WATER/MASS BALANCE WHICH PROVIDES THE USER WITH THE ABILITY TO READILY ASSESS THE IMPACT OF VARYING WATER QUALITIES, FLOW PATTERNS, AND FLOW RATES. THIS INFORMATION IS THEN USED IN DETERMINING PIPE AND EQUIPMENT SIZES.

   h. AVAILABILITY: POLLUTION ENGINEERING; V13 N2

   a. IRIS NUMBER -- this is the identification number sequentially assigned to materials as they are processed. Gaps in numbers mean that some items have been deleted, are being processed to add new information, or have been delayed in processing for some reason.

   b. PUBLICATION DATE -- date material was published according to information on the material.

   c. TITLE

   d. PERSONAL AUTHOR -- person or persons who wrote, compiled, or edited the material. Up to two personal authors can be listed.

   e. DESCRIPTOR -- subject terms which characterize substantive contents and form of the materials. The major terms are preceeded by an asterisk. Terms used to index all resumes in this compilation can be reviewed in the Subject Index.

f. DESCRIPTIVE NOTE -- various items of information may be contained in this section. For print materials the number of pages is usually listed. The price of the material quoted is the last time information was received from the source. Please note: Prices of nearly all materials are subject to changes and may not be accurate at the time a person orders a specific item.

g. ABSTRACT -- some early materials entered into IRIS did not have abstract information. All materials currently being entered into IRIS have an informative abstract that describes the contents of the item.

h. AVAILABILITY -- information in this field indicates where the material can be obtained.

2. Sample resume of material entered into ERIC (Resources in Education).

Items entered into ERIC (Resources in Education) will have a few additional data fields. See letter references "a" and "b" below.

IRIS ACCESSION NUMBER: EW006664
PUBLICATION DATE: 80
TITLE: RESOURCE DEVELOPMENT OF WATERSHED LANDS: A SIX WEEK SHORT COURSE.
DESCRIPTOR: ADMINISTRATION; ECOLOGICAL FACTORS; ECONOMIC FACTORS; INSTRUCTIONAL MATERIALS; *LAND USE; NATURAL RESOURCES; *POST SECONDARY EDUCATION; *TECHNICAL EDUCATION; *WATER RESOURCES; HYDROLOGY; NATURAL RESOURCES MANAGEMENT; WATER QUALITY; *WATERSHEDS

b. DESCRIPTIVE NOTE: EDRS PRICE: MF01 PLUS POSTAGE-NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT.

ABSTRACT: THIS COURSE WAS DESIGNED TO PROVIDE THE WATER RESOURCE TECHNICIAN OR MANAGER WITH INFORMATION WHICH WILL AID IN THE IMPLEMENTATION OF IMPROVEMENTS OF PRESENT LAND USE PRACTICES AND TO ILLUSTRATE ALTERNATIVE CONCEPTS AND TECHNIQUES IN LAND AND WATER USE FOR INCREASING AND IMPROVING THE MULTIPLE PRODUCTS OF WATERSHED LANDS. (ED 197 941)

a. AVAILABILITY: ERIC DOCUMENT REPRODUCTION SERVICE, P. O. BOX 190, ARLINGTON, VA 22210

a. ERIC NUMBER -- the ED number indicates the document has been processed and entered into Resources in Education. This identification number is the number to use when ordering a document or when requesting information about a document.

b. EDRS PRICE -- if material is available through the ERIC Document Reproduction Service, the price of the material when it was entered into the ERIC system and the form of the material is indicated. "MF" means microfiche; "HC" means Xerox copy. Prices are subject to change. Current prices of microfiche and paper copies are listed in the back of each issue of Resources in Education; consult the latest monthly issue for current prices. Information about ordering items can be obtained by contacting:

ERIC Document Reproduction Service (EDRS)
3900 Wheeler Avenue
Alexandria, VA 22304
(703) 823-0550

Items that are available on microfiche (MF) are contained in microfiche collections at over 700 sites where they can be read. For information on the microfiche locations in your state contact the EQ Instructional Resources Center.

B. How to Locate Desired Materials

Users can identify materials of interest by scanning the resume listings, or using the Subject Index or Author Index.

1. Subject Index

The Subject Index is designed to enable the user to search for information on either a broad subject or a narrow information concern. An EW number is included for each item listed under the subject heading. The EW number refers to the abstract entry in the resume section where complete bibliographic information, an abstract of the item, and availability information can be found.

A user can also coordinate a search by checking EW numbers that appear under two or more subject headings. For example, you could check all the EW numbers under Water Treatment and all the EW numbers under Films. EW numbers included under both subject headings would include information relevant to Water Treatment that were films. EW numbers under wastewater treatment and laboratory techniques would provide a list of materials related to Laboratory Techniques and to Wastewater Treatment. Similar techniques could be used to identify other information desired.

Users with ERIC microfiche should check the resume entry. If the document is available on microfiche from the ERIC Document Reproduction Service, the availability will be indicated by "MF" on the resume by "EDRS Price." This means libraries with ERIC microfiche collections should have the document on microfiche.

If you want a document available through the ERIC Document Reproduction Service (EDRS) see the section on ordering documents.

2. Author Index

If you desire to locate a document by the name of the author, you can use the Author Index. EW numbers are provided under the author in the Author Index as in the Subject Index. Some documents do not have a listed author; hence, they are not listed in this index.

III. Correcting an Existing IRIS Record

The IRIS data base will be updated on a quarterly basis. Corrections will be made to the data base at those times. You can help improve IRIS by sending corrections for items you find to be in error.

We request that you duplicate (copy) the resume from the compilation, mark the information you believe to be wrong (or incomplete), and send the marked resume to:

EQ Instructional Resources Center
1200 Chambers Road, Room 310
Columbus, Ohio 43212
(614) 422-6717

Corrections of errors will occur in the IRIS tapes at the next update after comments are received.

If you have difficulty obtaining materials from the listed source in the AVAILABILITY section of the resume, please let us know. We will contact the sources to verify whether the materials are available, but your assistance will provide corrections between annual availability checks.

If you are the supplier of materials in IRIS, please let us know if you remove a product from your list, modify a product on your list, or change the price of the product.

IV. Requests to Receive Information about IRIS and the IRC Bulletin

Information regarding IRIS, materials in IRIS, and modifications in the system will be announced in the IRC Bulletin. The Bulletin is issued about four times a year as information is available.

If you are not on the mailing list write to the EQ Instructional Resources Center for subscription information.

If you need information about IRIS you can also phone (614) 422-6717 with your questions.

V. Requests for Assistance in Using IRIS

If you need help in using the IRIS manuals, phone (614) 422-6717 or write to the EQ Instructional Resources Center. Staff are normally available from about 8:30 a.m. to 4:30 p.m. Eastern time to answer your questions.

VI. How to Locate Other Relevant Educational Materials

A number of people have requested information related to such areas as management, basic skills (reading, mathematics, writing) human relations, contract negotiations, and other topics. The EQ Instructional Resources Center has developed or obtained some materials in these areas.

Another excellent source of information for many educational concerns is the ERIC System.

ERIC is a national information system designed and developed by the U.S. Office of Education, and now supported and operated by the National Institute of Education (NIE), for providing ready access to descriptions of exemplary programs, research and development efforts, and related information that can be used in developing more effective educational programs.

There are 16 Clearinghouses in the nationwide ERIC network. Each specializes in a different, multi-discipline, educational area. Each searches out pertinent documents.

The ERIC Clearinghouses have responsibility within the network for acquiring the significant educational literature within their particular areas, selecting the highest quality and most relevant material, processing (i.e., cataloging, indexing, abstracting) the selected items for input to the data base, and also for providing information analysis products and various user services based on the data base.

The 16 ERIC Clearinghouses are listed on the next few pages, together with addresses, telephone numbers, and brief scope notes describing the areas they cover. You can contact them for assistance in locating information relevant to their scope notes.

A. ERIC Clearinghouse on Adult, Career, and Vocational Education
The Ohio State University
National Center for Research in Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
Telephone: (614) 486-3655

Career education, formal and informal at all levels, encompassing attitudes, self-knowledge, decision-making skills, general and occupational knowledge, and specific vocational and occupational skills; adult and continuing education, formal and informal, relating to occupational, family, leisure, citizen, organizational, and retirement roles; vocational and technical education, including new sub-professional fields, industrial arts, and vocational rehabilitation for the handicapped.

B. ERIC Clearinghouse on Counseling and Personnel Services
University of Michigan
School of Education, Room 2108
Ann Arbor, Michigan 48109
Telephone: (313) 764-9492

Preparation, practice, and supervision of counselors at all educational levels and in all settings, theoretical development of counseling and guidance, use and results of personnel procedures such as testing, interviewing, disseminating, and analyzing such information, group work and case work; nature of pupil, student, and adult characteristics; personnel workers and their relation to career planning, family consultations, and student orientation activities.

C. ERIC Clearinghouse on Elementary and Early Childhood Education
University of Illinois
College of Education
805 West Pennsylvania Avenue
Urbana, Illinois 61801
Telephone: (217) 333-1386

Prenatal factors, parental behavior; the physical, psychological, social, educational, and cultural development of children from birth through the primary grades; educational theory, research and practice related to the development of young children.

D. ERIC Clearinghouse on Educational Management
University of Oregon
Library, Room 108
1787 Agate Street
Eugene, Oregon 97403
Telephone: (503) 686-5043

Leadership, management, and structure of public and private educational organizations; practice and theory of administration; preservice and inservice preparation of administrators, tasks and processes of administration, methods and varieties of organization, organizational change, and social context of the organization.

Sites, buildings, and equipment for education; planning, financing, constructing, renovating, equipping, maintaining, operating, insuring, utilizing, and evaluating educational facilities.

E. ERIC Clearinghouse on Handicapped and Gifted Children
Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091
Telephone: (703) 620-3660

Aurally handicapped, visually handicapped, mentally handicapped, physically handicapped, emotionally disturbed, speech handicapped, learning disabilities, and the gifted; behavioral, psychomotor, and communication disorders, administration of special education services; preparation and continuing education of professional and paraprofessional personnel; preschool learning and development of the exceptional; general studies on creativity.

F. ERIC Clearinghouse on Higher Education
George Washington University
One Dupont Circle, NW, Suite 630
Washington, DC 20036
Telephone: (202) 296-2597

Various subjects relating to college and university students, college and university conditions and problems, college and university programs; curricular and instructional problems and programs, faculty, institutional research; federal programs, professional education (medical, law, etc.), graduate education, university extension programs, teaching-learning, planning, governance, finance, evaluation, interinstitutional arrangements, and management of higher educational institutions.

G. ERIC Clearinghouse on Information Resources
Syracuse University
School of Education
Huntington Hall, Room 030
150 Marshall Street
Syracuse, New York 13210
Telephone: (315) 423-3640

Management, operation, and use of libraries; the technology to improve their operation and the education, training, and professional activities of librarians and information specialists. Educational techniques involved in microteaching, systems analysis, and programmed instruction employing audiovisual teaching aids and technology, such as television, radio, computers, and cable television, communication satellites, microforms, and public television.

H. ERIC Clearinghouse for Junior Colleges
University of California at Los Angeles (UCLA)
Mathematical Sciences Building, Room 8118
405 Hilgard Avenue
Los Angeles, California 90024
Telephone: (213) 825-3931

Development, administration, and evaluation of public and private community junior colleges. Junior college students, staff, curricula, programs, libraries, and community services.

I. ERIC Clearinghouse on Languages and Linguistics
Center for Applied Linguistics
1118 "22nd" Street, NW
Washington, DC 20037
Telephone: (202) 429-9292

Languages and linguistics. Instructional methodology, psychology of language learning, cultural and intercultural content, application of linguistics, curricular problems and developments, teacher training and qualifications, language sciences, psycholinguistics, theoretical and applied linguistics, language pedagogy, bilingualism, and commonly taught languages including English and speakers of other languages.

J. ERIC Clearinghouse on Reading and Communication Skills
National Council of Teacher of English
1111 Kenyon Road
Urbana, Illinois 61801
Telephone: (217) 328-3870

Reading, English, and communication skills, preschool through college. Educational research and development in reading, writing, speaking, and listening. Identification, diagnosis, and remediation of reading problems. Speech communication--forensics, mass communication, interpersonal and small group interaction, interpretation, rhetorical and communication theory, instruction development, speech sciences, and theater. Preparation of instructional staff and related personnel in these areas.

All aspects of reading behavior with emphasis on physiology, psychology, sociology, and teaching. Instructional materials, curricula, tests and measurement, preparation of reading teachers and specialists, and methodology at all levels. Role of libraries and other agencies in fostering and guiding reading. Diagnostic and remedial services in school and clinical settings.

K. ERIC Clearinghouse on Rural Education and Small Schools
New Mexico State University
Box 3AP
Las Cruces, New Mexico 88003
Telephone: (505) 646-2623

Education of Indian Americans, Mexican Americans, Spanish Americans, and migratory farm workers and their children; outdoor education; economic, cultural, social, or other factors related to educational programs in rural areas and small schools; disadvantaged of rural and small school populations.

L. ERIC Clearinghouse for Science, Mathematics and Environmental Education
The Ohio State University
1200 Chambers Road - Room 310
Columbus, Ohio 43212
Telephone: (614) 422-6717

All levels of science, mathematics, and environmental education; development of curriculum and instructional materials; media applications; impact of interest, intelligence, values, and concept development upon learning; preservice and inservice teacher education and supervision.

M. ERIC Clearinghouse for Social Studies/Social Science Education
Social Science Education Consortium, Inc.
855 Broadway
Boulder, Colorado 80302
Telephone: (303) 492-8434

All levels of social studies and social science; all activities relating to teachers; content of disciplines; applications of learning theory, curriculum theory, child development theory, and instructional theory; research and development programs; special needs of student groups; education as a social science; social studies/social science and the community.

N. ERIC Clearinghouse on Teacher Education
American Association of Colleges for Teacher Education (AACTE)
One Dupont Circle, NW, Suite 610
Washington, DC 20036
Telephone: (202) 293-2450

School personnel at all levels, all issues from selection through preservice and inservice preparation and training to retirement; curricula, educational theory and philosophy; general education not specifically covered by Educational Management Clearinghouse; Title XI NDEA Institutes not covered by subject speciality in other ERIC Clearinghouses; all aspects of physical education.

O. ERIC Clearinghouse on Tests, Measurement, and Evaluation
Educational Testing Service (ETS)
Rosedale Road
Princeton, New Jersey 08541
Telephone: (609) 734-5176

Tests and other measurement devices; evaluation procedures and techniques; application of tests, measurement, or evaluation in educational projects of programs.

P. ERIC Clearinghouse on Urban Education
Teachers College, Columbia University
Institute for Urban and Minority Education
Box 40
525 West 120th Street
New York, New York 10027
Telephone: (212) 678-3433

The relationship between urban life and schooling; the effect of urban experiences and environments from birth onward; the academic, intellectual, and social performance of urban children and youth from grade three through college entrance (including the effect of self concept, motivation, and other affective influences), education of urban, Puerto Rican and Asian American populations, and rural and urban black populations; programs and practices which provide learning experiences designed to meet the special needs of diverse populations served by urban schools and which build upon their unique as well as their common characteristics, structural changes in the classroom, school, school system, and community and innovative instructional practices which directly affect urban children and youth; programs, practices, and materials related to economic and ethnic discrimination, segregation, desegregation, and integration in education; issues, programs, practices, and materials related to redressing the curriculum imbalance in the treatment of ethnic minority groups.

Q. Educational Resources Information Center
Central ERIC
National Institute of Education (NIE)
Information Resources Division
1200 - 19th Street, NW
Washington, DC 20208
Telephone: (202) 254-5500

There are other sources of educational information in many states. Included are information dissemination units in the state departments of education, intermediate education units, and local education units. In many cases, a local school administrator or school librarian can help you locate assistance.

VII. How to Order Materials

The AVAILABILITY field in the resume indicates where materials can be obtained. A few of the sources are explained.

A. A number of audiovisual materials can be obtained on a rental basis or purchased from the EQ Instructional Resources Center. Most items previously available from the NTOTC office are available from the EQ Instructional Resources Center at The Ohio State University. For further information write or call.

B. Some of the materials are available through the ERIC Document Reproduction Service. MF (microfiche) are 4" x 6" sheets of microfilm; up to 96 pages of text can be reproduced on one sheet. HC (paper copy) is a reproduction of the document in paper form at the original size.

Order forms for these materials can be obtained from:

ERIC Document Reproduction Service
3900 Wheeler Avenue
Alexandria, VA 22304
(703) 823-0550

C. The EQ Instructional resources Center will provide Xerox copies of materials that are not copyrighted for $1.00 per document plus $0.06 per page.

If you can not obtain materials that are listed or have difficulty obtaining materials, please contact the EQ Instructional Resources Center. We can provide assistance in obtaining materials from some sources. If materials become unavailable, we will remove them from the IRIS data base.

RESUME SECTION

IRIS ACCESSION NUMBER: EN011336

PUBLICATION DATE: MAR 83

TITLE: MANAGEMENT OF CONSTRUCTION CHANGE ORDERS: A GUIDE FOR GRANTEES.

DESCRIPTOR: *CHANGE ORDERS; CLEAN WATER ACT; *CONSTRUCTION; *CONSTRUCTION PROJECTS; *CONSTRUCTION CHANGE ORDERS; *EPA; *GUIDES; *MANAGEMENT; *REGULATIONS; *USEPA; *WASTEWATER TREATMENT; *WATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 18P. PRICE: $2.08

ABSTRACT: THIS PUBLICATION WAS DESIGNED TO OFFER GUIDANCE FOR MANAGING THE CHANGE ORDER PROCESS ON A CONSTRUCTION CONTRACT UNDER A GRANT FROM THE U.S. EPA CONSTRUCTION GRANTS PROGRAM. THE REPORT IS DESIGNED PRIMARILY FOR THOSE MANAGING A PROJECT FOR THE FIRST AND ONLY TIME. IT IS THEREFORE SOMEWHAT GENERAL AND MORE DETAILED TEXTS MAY BE DESIRED.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EN011678

PUBLICATION DATE: 79

TITLE: OPERATING A RECYCLING PROGRAM: A CITIZEN'S GUIDE.

PERSONAL AUTHOR: MULLIGAN, KEVIN; POWELL, JERRY

DESCRIPTOR: *CASE STUDIES; *CONSERVATION; *ECONOMICS; *MANAGEMENT; *NATURAL RESOURCES; OREGON; *INDUSTRIES; *OPERATIONS (SOLID WASTES); *RECYCLING; *SOLID WASTES; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 99P. PRICE: $6.94

ABSTRACT: PRESENTED ARE AN ASSORTMENT OF RECYCLING PROGRAM ALTERNATIVES, AN ASSORTMENT OF PROCEDURES FOR HANDLING AND MARKETING RECYCLABLES, AND SUGGESTIONS FOR FINANCING AND PUBLICIZING PROGRAMS. SECTIONS ARE INCLUDED ON MARKETS, MODELS OF OPERATION, OPERATIONS, PUBLICITY AND EDUCATION, FUNDING, AND A CASE STUDY.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD., 3RD FLOOR, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EN011947

PUBLICATION DATE: JAN 85

TITLE: PRICING AND EXPANSION OF A WATER SUPPLY SYSTEM.

PERSONAL AUTHOR: DANDY, GRAEME C.; AND OTHERS

DESCRIPTOR: *COSTS; *DEVELOPMENT; *ECONOMICS; *MODELS; *PLANNING; *RATES; *RATE STRUCTURES; *WATER RESOURCES;

*WATER SUPPLY; *WATER TREATMENT

DESCRIPTIVE NOTE: 24-42P.

ABSTRACT: A GENERAL MODEL FOR CONSTRAINED OPTIMUM WATER PRICING AND CAPACITY EXPANSION IS APPLIED TO TWO CITIES IN ONTARIO, CANADA. THE BENEFITS OF OPTIMUM PRICING AND CAPACITY EXPANSION ARE LIKELY TO BE GREATEST IN WATER SUPPLY SYSTEMS WHICH EXHIBIT ECONOMICS OF SCALE OR IN CITIES WHERE THE RATE OF POPULATION GROWTH IS SMALL.

AVAILABILITY: JOURNAL OF WATER RESOURCES PLANNING AND MANAGEMENT; V111 N1

IRIS ACCESSION NUMBER: EW011948

PUBLICATION DATE: JAN 85

TITLE: CLEANING AND LINING VERSUS PARALLEL MAINS.

PERSONAL AUTHOR: WALSKI, THOMAS M.

DESCRIPTOR: *CLEANING; *COSTS; *MAINTENANCE; *REHABILITATION; *MAINS; *PIPES; *WATER DISTRIBUTION; *WATER MAINS

DESCRIPTIVE NOTE: 43-53P.

ABSTRACT: THIS PAPER PRESENTS METHODS FOR SELECTING THE LENGTH OF WATER PIPE TO BE CLEANED AND LINED, AND THE DIAMETER AND LENGTH OF THE PARALLEL PIPE TO BE INSTALLED TO MEET A TARPET HEAD LOSS. IT ALSO COMPARES THE COSTS OF EACH APPROACH. IN GENERAL, THE DECISION TO CLEAN AND LINE A MAIN DEPENDS MOSTLY ON THE HEAD LOSS IN THE MAIN AT THE DESIGN FLOW RATE.

AVAILABILITY: JOURNAL OF WATER RESOURCES PLANNING AND MANAGEMENT; V111 N1

IRIS ACCESSION NUMBER: EW011949

PUBLICATION DATE: 85

TITLE: RESEARCH AGENDA FOR FLOODS TO SOLVE POLICY FAILURE.

PERSONAL AUTHOR: CHANGNON, STANLEY A., JR.

DESCRIPTOR: *ECONOMICS; *FLOODS; *LAND USE; *PLANNING; *POLICIES; *POLITICAL SCIENCE; *RECOMMENDATIONS; *RESEARCH NEEDS; *SOCIOLOGY; *RESEARCH USE; *TECHNOLOGY TRANSFER

DESCRIPTIVE NOTE: 54-64P.

ABSTRACT: THIS ARTICLE CONSIDERS FLOODS, POLICIES RELATED TO FLOODS, AND FUTURE POLICY AND RESEARCH NEEDS.

AVAILABILITY: JOURNAL OF WATER RESOURCES PLANNING AND MANAGEMENT; V111 N1

IRIS ACCESSION NUMBER: EW011950

PUBLICATION DATE: JAN 85

TITLE: MODELING THE CALIFORNIA STATE WATER PROJECT.

PERSONAL AUTHOR: CHUNG, [illegible]; HELWEG, OTTO

DESCRIPTOR: *CALIFORNIA; *MODELS; *PLANNING; *POLICIES; *SIMULATIONS; *STATE PROGRAMS; *REVENUES; *WATER PROJECTS; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: 82-97P.

ABSTRACT: IN THIS STUDY, A POPULAR MULTIPURPOSE, MULTIRESERVOIR SYSTEM MODEL WAS COMBINED WITH A DYNAMIC PROGRAMMING MODEL. PRELIMINARY RESULTS SUGGEST THAT THE STATE WATER PROJECTS' REVENUE MAY BE ALMOST DOUBLED BY ADOPTING THE SUGGESTED OPTIMAL OPERATIONS.

AVAILABILITY: JOURNAL OF WATER RESOURCES PLANNING AND MANAGEMENT; V111 N1

IRIS ACCESSION NUMBER: EW011951

PUBLICATION DATE: JAN 85

TITLE: OPTIMAL DESIGN OF DETENTION AND DRAINAGE CHANNEL SYSTEMS.

PERSONAL AUTHOR: BENNETT, MICHAEL S.; MAYS, LARRY W.

DESCRIPTOR: *DESIGN; *DETENTION BASINS; *DRAINAGE SYSTEMS; *MANAGEMENT; *MODELS; *PLANNING; *STORMWATER; *WATERSHEDS

DESCRIPTIVE NOTE: 99-112P.

ABSTRACT: DESCRIBED IS AN OPTIMIZATION MODEL THAT DETERMINES THE MINIMUM COST DETENTION AND DRAINAGE CHANNEL SYSTEM FOR A WATERSHED.

AVAILABILITY: JOURNAL OF WATER RESOURCES PLANNING AND MANAGEMENT; V111 N1

IRIS ACCESSION NUMBER: EW011953

PUBLICATION DATE: 84

TITLE: AGRICULTURE AND THE ENVIRONMENT: AN EXAMINATION OF CRITICAL ISSUES FOR FOOD POLICY.

PERSONAL AUTHOR: SWEETEN, JOHN, ED.; HUMENIK, FRANK J., ED.

DESCRIPTOR: *AGRICULTURE; *AIR QUALITY; *CHEMICALS; *ENVIRONMENT; *INDUSTRY; *MANAGEMENT; *NATURAL RESOURCES; *SOIL; *WASTE DISPOSAL; *WASTE TREATMENT; *WATER RESOURCES

DESCRIPTIVE NOTE: 123P. PRICE: $65.00

ABSTRACT: THIS PUBLICATION EXAMS A VARIETY OF TOPICS

RELATED TO AGRICULTURE AND THE ENVIRONMENT. SECTIONS INCLUDED ARE: (1) LAND RESOURCE BASE; (2) SOIL RESOURCE BASE; (3) WATER RESOURCE BASE; (4) CROP RESIDUE; (5) LIVESTOCK RESIDUE; (6) FOOD PROCESSING WASTES MANAGEMENT; (7) AGRICULTURAL CHEMICALS; (8) LAND TREATMENT OF MUNICIPAL WASTES; (9) LAND TREATMENT OF INDUSTRIAL WASTES; (10) SURFACE MINE RECLAMATION; (11) ODOR POLLUTION; AND (12) ENVIRONMENTAL AIR QUALITY.

AVAILABILITY: AMERICAN SOCIETY OF AGRICULTURAL ENGINEERS, 2950 NILES ROAD, ST. JOSEPH, MI 49085-9659

IRIS ACCESSION NUMBER: EW011954

PUBLICATION DATE: OCT 84

TITLE: WATER QUALITY INSTRUCTIONAL RESOURCES INFORMATION SYSTEM (IRIS) SUPPLEMENT XIX.

DESCRIPTOR: *AUDIOVISUAL AIDS; INDEXES; INFORMATION DISSEMINATION; *INSTRUCTIONAL MATERIALS; POSTSECONDARY EDUCATION; TECHNOLOGY; WASTE DISPOSAL; *WASTEWATER; WATER; WATER POLLUTION; *WATER QUALITY; *WATER RESOURCES; *WATER TREATMENT; *WASTEWATER TREATMENT; *OPERATIONS (WATER); *OPERATIONS (WASTEWATER)

DESCRIPTIVE NOTE: 134P. PRICE: $5.00

ABSTRACT: COMPILED ARE ABSTRACTS AND INDEXES TO SELECTED PRINT AND NON-PRINT MATERIALS RELATED TO WASTEWATER TREATMENT AND WATER QUALITY EDUCATION AND INSTRUCTION, AS WELL AS MATERIALS RELATED TO PESTICIDES, HAZARDOUS WASTES, AND PUBLIC PARTICIPATION. SOURCES OF ABSTRACTED/INDEXED MATERIALS INCLUDE ALL LEVELS OF GOVERNMENT, PRIVATE CONCERNS, AND EDUCATIONAL INSTITUTIONS. TITLE, AUTHOR(S), PUBLICATION DATE, CROSS-REFERENCES, DESCRIPTORS, AND AVAILABILITY ARE PROVIDED FOR EACH ENTRY. THIS PUBLICATION SUPPLEMENTS AND DOES NOT REPLACE "WATER QUALITY INSTRUCTIONAL RESOURCES INFORMATION SYSTEM (IRIS): A COMPILATION OF ABSTRACTS TO WATER QUALITY AND WATER RESOURCES MATERIALS" OR IRIS SUPPLEMENTS 1-18.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW011955

PUBLICATION DATE: JAN 85

TITLE: A/C INTERFACE: WORKSTATIONS IN THE LABORATORY, PART I.

PERSONAL AUTHOR: DESSY, RAYMOND E., ED.

DESCRIPTOR: *ANALYTICAL CHEMISTRY; *ANALYTICAL TECHNIQUES; *CHEMISTRY; *COMPUTERS; *COMPUTER APPLICATIONS; *LABORATORY FACILITIES; *WORKSTATIONS

DESCRIPTIVE NOTE: 76A-78AP.

ABSTRACT: THIS ARTICLE IS DESIGNED TO ACQUAINT ANALYTICAL CHEMISTS WITH THE VOCABULARY OF WORKSTATIONS, WHY THEY ARE NEEDED, HOW THEY PROVIDE PRODUCTIVITY LEVERAGE, AND POTENTIAL PITFALLS OF USING THEM. WORKSTATIONS ARE INTERACTIVE COMPUTER-BASED DEVICES THAT ALLOW THE USER TO CONTROL THE WORLD OF LABORATORY OPERATIONS.

AVAILABILITY: ANALYTICAL CHEMISTRY; V57 N1

IRIS ACCESSION NUMBER: EW011956

PUBLICATION DATE: 84

TITLE: WPCF COMMITTEE REPORTS: GENERAL DIRECTIONS FOR THE U.S. CLEAN WATER PROGRAM.

DESCRIPTOR: *CLEAN WATER PROGRAM; *GOVERNMENT ROLE; *MANAGEMENT; *POLICIES; *RECOMMENDATIONS; *RESEARCH; *TRAINING; *WATER POLLUTION CONTROL; *WATER QUALITY; *WPCF

DESCRIPTIVE NOTE: 1220-1222P.

ABSTRACT: THIS ARTICLE IS A STATEMENT OF A WPCF TASK FORCE ON GENERAL DIRECTIONS THAT ARE CONSIDERED NECESSARY FOR THE CLEAN WATER PROGRAM. IN ADDITION, SUGGESTIONS FOR IMPLEMENTATION RESPONSIBILITIES ARE PRESENTED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N12

IRIS ACCESSION NUMBER: EW011957

PUBLICATION DATE: 84

TITLE: BIOLOGICAL HEALTH RISKS ASSOCIATED WITH THE COMPOSTING OF WASTEWATER TREATMENT PLANT SLUDGE.

PERSONAL AUTHOR: CLARK, C. S.; AND OTHERS

DESCRIPTOR: *COMPOSTING; *HEALTH; *OCCUPATIONAL SAFETY; *RESEARCH REPORTS; *SAFETY; *SLUDGE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1269-1276P.

ABSTRACT: REPORTED IS A STUDY CONDUCTED BETWEEN 1979 AND 1981 AT WASTEWATER SLUDGE COMPOSTING FACILITIES. THE EFFECTS OBSERVED MAY NOT RELATE DIRECTLY TO THE USE OF SLUDGE, BUT THEY DO JUSTIFY MORE STUDIES ON WORKERS IN COMPOSTING OPERATIONS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N12

IRIS ACCESSION NUMBER: EW011958

PUBLICATION DATE: 85

TITLE: TRAINING TO MANAGE CONFLICTS.

PERSONAL AUTHOR: CHASNOFF, ROBERT; MUNIZ, PETER

DESCRIPTOR: *CONFLICT; *MANAGEMENT; *PERSONNEL; *STAFF DEVELOPMENT; *SUPERVISION; *TRAINING

DESCRIPTIVE NOTE: 49-53P.

ABSTRACT: THIS ARTICLE PRESENTS INFORMATION ON CONFLICT MANAGEMENT PROGRAMS AND CONFLICT TRAINING.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V39 N1

IRIS ACCESSION NUMBER: EW011959

PUBLICATION DATE: 85

TITLE: THEY MAY LOVE IT BUT WILL THEY USE IT?

PERSONAL AUTHOR: TROST, ARTY

DESCRIPTOR: *NEEDS ASSESSMENT; *MANAGEMENT; *PERFORMANCE EVALUATION; *PROGRAM IMPROVEMENT; *SKILL DEVELOPMENT; *TRAINING; *SKILL TRANSFER

DESCRIPTIVE NOTE: 78-81P.

ABSTRACT: INVOLVING THE TRAINER, TRAINEE AND THE TRAINEE'S MANAGER BEFORE, DURING, AND AFTER TRAINING CAN MAKE TRAINING EFFORTS RESULT IN CHANGED WORK BEHAVIOR.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V39 N1

IRIS ACCESSION NUMBER: EW011960

PUBLICATION DATE: 85

TITLE: BREAKING BARRIERS TO SKILL TRANSFER.

PERSONAL AUTHOR: ROBINSON, DANA GAINES; ROBINSON, JAMES C.

DESCRIPTOR: *MANAGEMENT; *PERFORMANCE EVALUATION; *SKILL TRANSFER; *TRAINING

DESCRIPTIVE NOTE: 82-83P.

ABSTRACT: MANAGEMENT MUST ASSUME A CENTRAL ROLE IN GUARANTEEING THAT SKILLS LEARNED IN TRAINING PROGRAMS ARE USED ON THE JOB. BARRIERS TO SKILL TRANSFER ARE IDENTIFIED AND SOME SUGGESTIONS FOR REMOVING THE BARRIERS ARE CONSIDERED.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V39 N1

IRIS ACCESSION NUMBER: EW011961

PUBLICATION DATE: 85

TITLE: AN ANXIETY MANAGEMENT APPROACH TO COMPUTERPHOBIA.

PERSONAL AUTHOR: BLOOM, ARVID J.

DESCRIPTOR: *COMPUTERS; *COMPUTER APPLICATIONS; *MANAGEMENT; *TRAINING

DESCRIPTIVE NOTE: 90-94P.

ABSTRACT: THIS ARTICLE CONSIDERS COMMON FEARS OF NEW COMPUTER USERS AND APPROACHES TO USE TO REDUCE ANXIETY.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V39 N1

IRIS ACCESSION NUMBER: EW011962

PUBLICATION DATE: 85

TITLE: THE QUANTITY AND QUALITY OF EVALUATING TRAINING.

PERSONAL AUTHOR: SWIERCZEK, FREDRIC WILLIAM; CARMICHAEL, LYNNE

DESCRIPTOR: *EVALUATION; *MANAGEMENT; *PERFORMANCE EVALUATION; *PLANNING; *TRAINING

DESCRIPTIVE NOTE: 95-99P.

ABSTRACT: DESCRIBED ARE WAYS OF EVALUATING TRAINING. THE EMPHASIS IS ON OBTAINING MORE INFORMATION FROM EVALUATION PROCEDURES.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V39 N1

IRIS ACCESSION NUMBER: EW011963

PUBLICATION DATE: 85

TITLE: SHOULD YOU BECOME A P.E.?

PERSONAL AUTHOR: BASTA, NICHOLAS

DESCRIPTOR: *ENGINEERING; *LICENSES; *PROFESSIONAL ENGINEERS; *REGISTRATION; *REGULATIONS; *TESTS

DESCRIPTIVE NOTE: 91-94P.

ABSTRACT: A PROFESSIONAL ENGINEER'S LICENSE OFTEN IS NOT REQUIRED, BUT THERE ARE REASONS TO TAKE THE FIRST TEST BEFORE LEAVING COLLEGE. THIS ARTICLE PRESENTS REASONS WHY THE TEST SHOULD BE TAKEN.

AVAILABILITY: GRADUATING ENGINEER; V6 N3

IRIS ACCESSION NUMBER: EW011964

PUBLICATION DATE: 84

TITLE: MODEL FOR ALLOCATING WATER TO ENERGY AND AGRICULTURAL PRODUCTION.

PERSONAL AUTHOR: COULTER, I. C.; AND OTHERS

DESCRIPTOR: *AGRICULTURE; *ENERGY; *ENERGY PRODUCTION; *MODELS; *PLANNING; *RESOURCE ALLOCATION; *WATER RESOURCES

DESCRIPTIVE NOTE: 21P. PRICE: $5.00

ABSTRACT: A SCREENING MODEL FOR ALLOCATION OF WATER AMONG AGRICULTURAL DEMANDS, OILSANDS/HEAVY OIL DEVELOPMENT REQUIREMENTS AND HYDROELECTRIC GENERATING FACILITIES IS PRESENTED. THE MODEL IS BASED UPON THE LINEAR PROGRAMMING TECHNIQUE. THE MULTI-OBJECTIVE ASPECTS OF THE PROBLEM ARE CONSIDERED THROUGH USE OF THE METHOD OF VARIATION OF WEIGHTS.

AVAILABILITY: AMERICAN SOCIETY OF AGRICULTURAL ENGINEERS, 2950 NILES ROAD, ST. JOSEPH, MI 49085

IRIS ACCESSION NUMBER: EW011965

PUBLICATION DATE: 84

TITLE: MULTI OBJECTIVE ANALYSIS FOR LARGE SCALE AGRICULTURAL WATER PROJECTS.

PERSONAL AUTHOR: COULTER, I. C.

DESCRIPTOR: *AGRICULTURE; *ASSESSMENT; *CASE STUDIES; *MODELS; *MULTI-OBJECTIVE ANALYSIS; *PLANNING; *PROJECT ANALYSIS; *WATER RESOURCES; *WATER RESOURCE PROJECTS

DESCRIPTIVE NOTE: 9P. PRICE: $5.00

ABSTRACT: MULTI-OBJECTIVE TECHNIQUES SUITABLE FOR AGRICULTURAL WATER RESOURCES PROJECTS ARE REVIEWED. CASE STUDIES OF APPLICATION OF THESE TECHNIQUES ARE DISCUSSED. GOAL PROGRAMMING IS SUGGESTED AS BEING SUITABLE FOR A LARGE NUMBER OF AGRICULTURALLY BASED WATER RESOURCES PROJECTS.

AVAILABILITY: AMERICAN SOCIETY OF AGRICULTURAL ENGINEERS, 2950 NILES ROAD, ST. JOSEPH, MI 49085

IRIS ACCESSION NUMBER: EW011966

PUBLICATION DATE: 83

TITLE: A PROCEDURE FOR PRIORITIZING WATER QUALITY PROBLEM AREAS.

PERSONAL AUTHOR: BOSCH, D.D.; AND OTHERS

DESCRIPTOR: *AGRICULTURAL NONPOINT SOURCE POLLUTION MODEL; MINNESOTA; *MODELS; *NONPOINT SOURCE POLLUTION; *POLLUTION CONTROL; *SIMULATIONS; *SURFACE RUNOFF; *WATERSHEDS; *WATER QUALITY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 22P. PRICE: $5.00

ABSTRACT: A COMPUTER SIMULATION MODEL HAS BEEN DEVELOPED TO PRIORITIZE THE QUALITY OF RUNOFF FROM MINNESOTA WATERSHEDS.

AGRICULTURAL NONPOINT SOURCE POLLUTION MODEL (AGNPS) PREDICTS RUNOFF VOLUME AND RATE, ERODED AND DELIVERED SEDIMENT, AND NUTRIENT CONCENTRATIONS FOR SINGLE STORM EVENTS FOR ALL POINTS IN THE WATERSHED.

AVAILABILITY: AMERICAN SOCIETY OF AGRICULTURAL ENGINEERS, 2950 NILES ROAD, ST. JOSEPH, MI 49085

IRIS ACCESSION NUMBER: EW011967

PUBLICATION DATE: 83

TITLE: WATER QUALITY PROTECTION BY A LAKE MANAGEMENT DISTRICT.

PERSONAL AUTHOR: NIMMER, G. L.; AND OTHERS

DESCRIPTOR: *CASE HISTORIES; *LAKES; *LAKE MANAGEMENT DISTRICT; *MANAGEMENT; *PLANNING; *POLLUTION CONTROL; *WATER RESOURCES; *WATER QUALITY; *WISCONSIN

DESCRIPTIVE NOTE: 17P. PRICE: $5.00

ABSTRACT: THIS IS A CASE HISTORY OF THE PROGRESS OF THE BIG CEDAR LAKE MANAGEMENT PROGRAM. DETAILS OF ORGANIZING A LAKE MANAGEMENT DISTRICT, CONDUCTING A FEASIBILITY STUDY, AND IMPLEMENTING THE PROGRAM ARE REVIEWED TO ILLUSTRATE IMPORTANT ELEMENTS OF A SUCCESSFUL LAKE MANAGEMENT PROGRAM.

AVAILABILITY: AMERICAN SOCIETY OF AGRICULTURAL ENGINEERS, 2950 NILES ROAD, ST. JOSEPH, MI 49083

IRIS ACCESSION NUMBER: EW011968

PUBLICATION DATE: 83

TITLE: RESOURCE INVENTORY AND BASELINE STUDY METHODS FOR DEVELOPING COUNTRIES.

PERSONAL AUTHOR: CONANT, FRANCIS, ED.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *DEVELOPING COUNTRIES; *MANAGEMENT; *NATURAL RESOURCES; *PLANNING; PLANTS; RESEARCH METHODS; *SURVEYS; SOILS; *RESOURCE INVENTORIES; WATER; WILDLIFE

DESCRIPTIVE NOTE: 564P. PRICE: $22.95; AAAS MEMBER, $19.95

ABSTRACT: THIS PUBLICATION EXPLAINS CURRENT QUALITATIVE AND QUANTITATIVE METHODS FOR ESTABLISHING RENEWABLE NATURAL RESOURCE INVENTORIES AND ENVIRONMENTAL BASELINE SURVEYS. THE INVENTORIES FOCUS ON OBTAINING AND ANALYZING FOUR ECOSYSTEM COMPONENTS: SOILS, WATER, PLANTS, AND WILDLIFE.

AVAILABILITY: AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, 1101 VERMONT AVENUE, N. W., DEPT. RIE, WASHINGTON, DC 20005

IRIS ACCESSION NUMBER: EW011969

PUBLICATION DATE: AUG 84

TITLE: EPA METHOD STUDY 16 METHOD 606 - PHTHALATE ESTERS. PROJECT SUMMARY.

PERSONAL AUTHOR: MILLAR, JOHN D.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *EPA METHOD STUDY; *LABORATORY PROCEDURES; *PHTHALATE ESTERS; *POLLUTANTS; USEPA; *WATER TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 3P. FOR COMPLETE REPORT: PRICE, $11.50; ORDER NO. PB84-211275

ABSTRACT: THIS REPORT DESCRIBES THE RESULTS OBTAINED AND DATA ANALYSIS FROM AN INTERLABORATORY METHOD STUDY OF EPA METHOD 606 (PHTHALATE ESTERS).

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011970

PUBLICATION DATE: AUG 84

TITLE: EPA METHOD STUDY 15 METHOD 605 - BENZIDINES. PROJECT SUMMARY.

PERSONAL AUTHOR: KINZER, GLENN; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *BENZIDINES; *EPA METHOD STUDY; *LABORATORY STUDY; *POLLUTANTS; USEPA; *WATER TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 3P. FOR COMPLETE REPORT: PRICE $11.00; ORDER NO. PB84-211176.

ABSTRACT: THIS REPORT DESCRIBES THE RESULTS OBTAINED AND DATA ANALYSIS FROM AN INTERLABORATORY METHOD STUDY OF EPA METHOD 605 (BENZIDINES).

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011972

PUBLICATION DATE: 84

TITLE: PROCEEDINGS OF THE FIFTEENTH MID-ATLANTIC INDUSTRIAL WASTES CONFERENCE.

PERSONAL AUTHOR: LAGREGA, MICHAEL D.; HENDRAN, LINDA K., ED.

DESCRIPTOR: *COMPLIANCE; *CONFERENCE PROCEEDINGS; HAZARDOUS WASTES; *HAZARDOUS MATERIALS; *INDUSTRIAL WASTES; *MANAGEMENT; *TOXIC SUBSTANCES; *WASTE MANAGEMENT; *WASTE TREATMENT

DESCRIPTIVE NOTE: 647P. PRICE: $49.95

ABSTRACT: HAZARDOUS WASTE MANAGEMENT HAS BECOME ONE OF THE MOST IMPORTANT TOPICS OF THE 1980S. IT IS INCUMBENT UPON PUBLIC WORKS OFFICIALS AND THEIR CONSULTANTS TO BE FULLY INFORMED ON THIS SUBJECT SINCE THE IMPROPER MANAGEMENT OF HAZARDOUS MATERIALS CAN HAVE A SEVERE IMPACT ON THE PUBLIC. THE 53 ARTICLES IN THIS VOLUME COVER NUMEROUS ASPECTS OF THE CURRENT STATE-OF-THE-ART INCLUDING BIOLOGICAL WASTE TREATMENT, INCINERATION, INTERNATIONAL WORK, REGULATORY COMPLIANCE, RECYCLING AND REUSE, TREATMENT, CONTROL OF HEAVY METALS, MANAGEMENT, PHYSICAL-CHEMICAL TREATMENT, STORAGE AND DISPOSAL FACILITIES, SLUDGE, SITE CLEAN-UP, AND INDUSTRIAL WASTES. NUMEROUS TABLES, CHARTS, AND DIAGRAMS, ARE INCLUDED.

AVAILABILITY: BUTTERWORTH PUBLISHERS, 10 TOWER OFFICE PARK, WOBURN, MA 01801

IRIS ACCESSION NUMBER: EW011973

PUBLICATION DATE: NOV 84

TITLE: ERT HANDBOOK ON PERMITTING UNDER THE RESOURCE CONSERVATION AND RESOURCE RECOVERY ACT. UPDATE ON 1984 REAUTHORIZATION.

PERSONAL AUTHOR: CASLER, JANE

DESCRIPTOR: *COMPLIANCE; *FACILITIES; *FINANCIAL OBLIGATIONS; *HAZARDOUS WASTES; *MONITORING; *PERMIT APPLICATIONS; *PERMITS; *PLANNING; *POLLUTION CONTROL; *RCRA; *REGULATIONS; *TOXIC SUBSTANCES; *WASTE DISPOSAL; *USEPA

DESCRIPTIVE NOTE: 70P.

ABSTRACT: THIS HANDBOOK SUMMARIZES A NUMBER OF TOPICS RELATED TO THE RESOURCE CONSERVATION AND RECOVERY ACT. THE 1984 REAUTHORIZATION IS STRESSED.

AVAILABILITY: ENVIRONMENTAL RESEARCH AND TECHNOLOGY, INC., 696 VIRGINIA ROAD, CONCORD, MA 01742

IRIS ACCESSION NUMBER: EW011974

PUBLICATION DATE: 84

TITLE: DEVELOPING FINANCIAL PROGRAMS IN THE '80S.

DESCRIPTOR: *CAPITAL FINANCING; *CONFERENCE PROCEEDINGS; *COSTS; *FACILITIES; *MANAGEMENT; *PLANNING; *UTILITIES; *WATER UTILITIES; *WATER SUPPLY; *WATER TREATMENT

DESCRIPTIVE NOTE: PRICE: MEMBERS $10.00; NONMEMBERS $12.50

ABSTRACT: THIS PUBLICATION IS DESIGNED TO HELP WATER UTILITIES PLAN AND MEET FUTURE FINANCING NEEDS. ARTICLES IN THE PUBLICATION INCLUDE: (1) THE WATER INDUSTRY IN THE 1980S; (2) INFRASTRUCTURE: AN END IN ITSELF OR THE MEANS TO AN END; (3) AGING INFRASTRUCTURE: A NEED FOR FEDERAL FUNDING

OF URBAN WATER SUPPLY SYSTEMS; (4) FINANCING CAPITAL REQUIREMENTS; (5) CURRENT-DAY MONEY MARKET CONDITIONS; AND (6) MARKETING THE SECOND PRODUCT OF OUR WATER UTILITIES; THE PORTLAND EXPERIENCE.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION COMPUTER SERVICES DEPT., 6666 WEST QUINCY AVE., DENVER, CO 80235

IRIS ACCESSION NUMBER: EW011976

PUBLICATION DATE: AUG 84

TITLE: DESIGN MANUAL: REMOVAL OF FLUORIDE FROM DRINKING WATER SUPPLIES BY ACTIVATED ALUMINA.

PERSONAL AUTHOR: RUBEL, F., JR.

DESCRIPTOR: *ACTIVATED ALUMINA; *COSTS; *DESIGN MANUALS; *DRINKING WATER; *FLUORIDE; *MAINTENANCE; *MANUALS; *OPERATIONS (WATER); *TECHNOLOGY; *WATER TREATMENT

DESCRIPTIVE NOTE: 102P. PRICE CODE: PC A06/MF A01. ORDER NO.: PB85-113991/WEP

ABSTRACT: THIS MANUAL IS AN IN-DEPTH PRESENTATION OF THE STEPS REQUIRED TO DESIGN AND OPERATE A WATER TREATMENT PLANT FOR THE REMOVAL OF EXCESS FLUORIDE USING THE ACTIVATED ALUMINA METHOD. A DESCRIPTION OF THE BASIC TECHNOLOGY OF FLUORIDE REMOVAL BY ACTIVATED ALUMINA IS INCLUDED IN ADDITION TO DESIGN EXAMPLES AND CAPITAL, OPERATION AND MAINTENANCE COSTS ASSOCIATED WITH MAJOR COST VARIABLES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011977

PUBLICATION DATE: NOV 84

TITLE: WASTEWATER TREATMENT: LAGOONS. 1977 - NOVEMBER, 1984 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *DESIGN; *EQUIPMENT; *INDUSTRIAL WASTES; *LAGOONS; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 204P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-850055/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE TREATMENT OF WASTEWATER IN AERATED LAGOONS. THE DESIGN, OPERATION, EQUIPMENT AND PRETREATMENT PROCESSES ARE DISCUSSED. THE TREATMENT OF WASTEWATER FROM BREWERIES, TANNERIES, PAPER MILLS AND OTHER INDUSTRIAL OPERATIONS ARE CONSIDERED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 203 CITATIONS, 13 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285

PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011978

PUBLICATION DATE: NOV 84

TITLE: OZONIZATION USED IN WATER AND SEWAGE TREATMENT. 1970 - NOVEMBER, 1984 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *DISINFECTION; *OZONE; *RESEARCH REPORTS; *WASTEWATER TREATMENT; *WATER TREATMENT

DESCRIPTIVE NOTE: 242P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-850246/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE UTILIZATION OF OZONE FOR THE PURIFICATION OF INDUSTRIAL WASTEWATER, SEWAGE, AND DRINKING WATER. TOPICS INCLUDE LABORATORY AND FIELD INVESTIGATIONS OF OZONE PURIFICATION TECHNIQUES ALONE, AND IN COMBINATION WITH OTHER WATER AND SEWAGE TREATMENT METHODS. SOME CONSIDERATION IS GIVEN TO TOXIC EFFECTS OF PRODUCTS RESULTING FROM OZONE TREATMENT OF SEWAGE AND WASTEWATERS. (THIS UPDATED BIBLIOGRAPHY CONTAINS 243 CITATIONS, 48 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011979

PUBLICATION DATE: NOV 84

TITLE: CHELATING AGENTS IN PLATING PROCESSES. 1970 - OCTOBER, 1984 (CITATIONS FROM THE U.S. PATENT DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *CHELATING AGENTS; *ELECTROPLATING; *INDUSTRIAL WASTES; *INDUSTRIES; *METALS; *POLLUTION CONTROL; *WASTE TREATMENT

DESCRIPTIVE NOTE: 83P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-850360/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS SELECTED PATENTS CONCERNING CHELATING AGENTS IN PLATING PROCESSES. ELECTROPLATING, ELECTRODEPOSITION AND ELECTROLESS PLATING ARE INCLUDED. WASTE TREATMENT OF PLATING SOLUTIONS IS DISCUSSED. (CONTAINS 104 CITATIONS FULLY INDEXED AND INCLUDING A TITLE LIST.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011980

PUBLICATION DATE: NOV 84

TITLE: DDT, DDD, AND DDE PESTICIDES. 1977 - NOVEMBER, 1984 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *DDD; *DDT; *DDE; *ECOLOGICAL EFFECTS; *PESTICIDES; *POLLUTION CONTROL

DESCRIPTIVE NOTE: 202P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-850233/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING CONTAMINATION BY AND POLLUTION EFFECTS OF THE PESTICIDES DDD, DDT, AND DDE. TOPICS INCLUDE SITE STUDIES IN SPECIFIC AREAS, ACCUMULATION IN SOILS AND ORGANISMS, AND LABORATORY AND FIELD INVESTIGATIONS REGARDING EFFECTS ON PLANTS AND ANIMALS. SOME ATTENTION IS GIVEN TO OCCUPATIONAL EXPOSURE STUDIES AND TO MODELING THE FATE AND TRANSPORT OF THESE COMPOUNDS. (THIS UPDATED BIBLIOGRAPHY CONTAINS 222 CITATIONS, 23 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011981

PUBLICATION DATE: JUN 84

TITLE: ENVIRONMENTAL PROGRESS AND CHALLENGES: AN EPA (ENVIRONMENTAL PROTECTION AGENCY) PERSPECTIVE.

PERSONAL AUTHOR: CRAMPTON, L. S. W.; AND OTHERS

DESCRIPTOR: *AIR POLLUTION; EPA; *LAND USE; *PLANNING; *REPORTS; *TRENDS; USEPA; *WATER POLLUTION

DESCRIPTIVE NOTE: 125P. PRICE CODE: PC A06/MF A01. ORDER NO.: PB85-112209/WEP

ABSTRACT: THIS REPORT PRESENTS THE ENVIRONMENTAL PROTECTION AGENCY'S (EPA'S) ASSESSMENT OF THE PROGRESS WE HAVE MADE AS A NATION IN IMPROVING THE QUALITY OF THE AIR WE BREATHE, THE WATER WE DEPEND ON, AND THE LAND WHERE WE LIVE. MORE IMPORTANTLY, IT PRESENTS EPA'S AGENDA FOR RESTORING AND PROTECTING THESE RESOURCES FROM PAST AND FUTURE ENVIRONMENTAL HAZARDS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011982

PUBLICATION DATE: NOV 84

TITLE: WASTE PROCESSING AND POLLUTION IN THE CHEMICAL AND PETROCHEMICAL INDUSTRIES. JULY, 1980 - FEBRUARY, 1983

(CITATIONS FROM THE NTIS

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *CHEMICALS; *HEALTH; *INDUSTRIES; *INDUSTRIAL WASTES; *OIL; *PETROCHEMICALS; *POLLUTION CONTROL; *WASTE DISPOSAL; *WASTE PROCESSING

DESCRIPTIVE NOTE: 213P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-850105/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING CONTROL PROCESSES AND EQUIPMENT, ECONOMIC FACTORS, AND EMISSIONS REGARDING POLLUTION AND WASTE PROCESSING IN THE CHEMICAL AND PETROCHEMICAL INDUSTRIES. HEALTH HAZARD EVALUATIONS AND OCCUPATIONAL EXPOSURE INVESTIGATIONS AT SPECIFIC CHEMICAL PLANTS ARE DISCUSSED. POLLUTION STUDIES PERTAINING TO MUNITIONS MANUFACTURE ARE ALSO INCLUDED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 225 CITATIONS, NONE OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EN011933

PUBLICATION DATE: NOV 84

TITLE: WASTE PROCESSING AND POLLUTION IN THE CHEMICAL AND PETROCHEMICAL INDUSTRIES. MARCH, 1983 - NOVEMBER, 1984 (CITATIONS FROM THE NTIS

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *CHEMICALS; *HEALTH; *INDUSTRIES; *INDUSTRIAL WASTES; *OIL; *PETROCHEMICALS; *POLLUTION CONTROL; *WASTE DISPOSAL; *WASTE PROCESSING

DESCRIPTIVE NOTE: 172P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-850113/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING TECHNIQUES AND EQUIPMENT UTILIZED FOR POLLUTION CONTROL IN THE CHEMICAL AND PETROCHEMICAL INDUSTRIES. TOPICS INCLUDE EMISSIONS INVESTIGATIONS, RECYCLING AND MATERIALS RECOVERY STUDIES, AND STANDARDS FOR SPECIFIC INDUSTRIES. SOURCES, SITE HEALTH HAZARD EVALUATIONS, AND THE TOXICITY OF SPECIFIC CHEMICALS ARE ALSO DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 181 CITATIONS, ALL OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EN011934

PUBLICATION DATE: DEC 84

TITLE: SEWER REHAB: NEW CONCEPTS AND TECHNOLOGY FOR COLLECTION SYSTEMS.

PERSONAL AUTHOR: NOGAJ, RICHARD J.

DESCRIPTOR: *CONFERENCE PROCEEDINGS; *EVALUATION; *INFILTRATION; *INFLOW; *MAINTENANCE; *REHABILITATION, *SEWERS; *TECHNOLOGY; *USEPA; *WASTEWATER COLLECTION; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 10-14P.

ABSTRACT: THIS ARTICLE PRESENTS A CONDENSATION OF THE EPA SPONSORED SEMINAR ON "NEW CONCEPTS IN I/I EVALUATION AND SEWER SYSTEM REHABILITATION" PRESENTED IN NEW ORLEANS IN 1984.

AVAILABILITY: OPERATIONS FORUM; V1 N6

IRIS ACCESSION NUMBER: EW011985

PUBLICATION DATE: DEC 84

TITLE: A CLOSER LOOK AT LATERALS: HOW TO FIND AND CONTROL LEAKS IN SMALL SEWERS.

PERSONAL AUTHOR: KEPPLE, LARRY G.; SMITH, SAMUEL L.

DESCRIPTOR: *EVALUATION; *INFILTRATION; *INFLOW; *LEAKS; *LATERALS; *LATERAL TESTS; *MAINTENANCE; *MONITORING; *REHABILITATION; *SEWERS; *WASTEWATER COLLECTION; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 15-21P.

ABSTRACT: DESCRIBED ARE PROCEDURES AND TECHNIQUES FOR FINDING AND CONTROLLING LEAKS IN SMALL SEWERS.

AVAILABILITY: OPERATIONS FORUM; V1 N6

IRIS ACCESSION NUMBER: EW011986

PUBLICATION DATE: 12/1 85

TITLE: COMPUTERS SPEED AND SIMPLIFY WATER TREATMENT TECHNIQUES.

PERSONAL AUTHOR: NADER, PAUL P.; AND OTHERS

DESCRIPTOR: *COMPUTERS; *COMPUTER APPLICATIONS; *MANAGEMENT; *MONITORING; *OPERATIONS (WATER); *WATER TREATMENT

DESCRIPTIVE NOTE: 18-20P.

ABSTRACT: COMPUTER TOOLS ENABLE ONE SERVICE COMPANY TO CUSTOM DESIGN, MONITOR, AND EVALUATE A WATER TREATMENT PROGRAM WITH MAXIMUM SPEED AND EFFICIENCY. WATER SYSTEM CONDITIONS ARE TRANSMITTED TO AN EASILY ACCESSED CONTROL INFORMATION BASE WHICH PROVIDES FAST ANALYSIS, REPORTS, AND COMPARISONS.

AVAILABILITY: ENERGY MANAGEMENT TECHNOLOGY; V8 N9

IRIS ACCESSION NUMBER: EW011987

PUBLICATION DATE: 12/1 85

TITLE: TECHNICAL SAVVY AND TIGHT CONTROL CUT HOSPITAL WATER TREATMENT COSTS.

DESCRIPTOR: *BOILERS; *COSTS; *ENERGY; *HOSPITALS; *EQUIPMENT; *MANAGEMENT; *MAINTENANCE; *OPERATOR TRAINING; *WATER TREATMENT; *WATER SYSTEMS

DESCRIPTIVE NOTE: 22-23P.

ABSTRACT: DISCOURAGED BY THE HIGH CHEMICAL, ENERGY, AND MAINTENANCE COSTS ACCRUING TO ITS WATER TREATMENT SYSTEM, A WISCONSIN HOSPITAL TURNED TO A SUPPLIER WITH A PRACTICAL APPROACH TO WATER SYSTEM TECHNOLOGY. EIGHTEEN MONTHS OF CAREFUL CHANGES IN CHEMICALS, FEEDWATER POINTS AND CONTROL STRATEGIES, COMBINED WITH CAREFUL TRAINING OF HOSPITAL PERSONNEL, HAVE PAID OFF IN DRAMATIC ENERGY SAVINGS.

AVAILABILITY: ENERGY MANAGEMENT TECHNOLOGY; V8 N9

IRIS ACCESSION NUMBER: EW011988

PUBLICATION DATE: DEC 84

TITLE: STUDY OF THE FUTURE FEDERAL ROLE IN MUNICIPAL WASTEWATER TREATMENT. REPORT TO THE ADMINISTRATOR.

DESCRIPTOR: *CURRENT NEEDS; *FACILITIES; *FINANCING; *FUNDING; *FEDERAL ROLE; *FUTURE NEEDS; *LOCAL ROLE; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; PROJECT REPORT; *STATE ROLE; *USEPA; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 133P. PRICE: $9.28

ABSTRACT: THIS STUDY ATTEMPTED TO DETERMINE THE BEST WAY TO DELIVER LIMITED FEDERAL FUNDS IN FUTURE YEARS SO THAT WASTEWATER FACILITIES WILL BE COMPLETED, WATER QUALITY WILL BE PROTECTED, AND STATES AND LOCALITIES WILL RECEIVE INCENTIVES FOR BECOMING SELF-SUFFICIENT OVER THE LONG TERM. THE REPORT INDICATES (1) EIGHT AREAS OF CONSENSUS, (2) NEEDS ARE STILL GREAT, (3) STATE AND LOCAL WASTEWATER FINANCING ENTITIES STILL NEED FEDERAL ASSISTANCE, AND (4) A MIX OF FINANCING PROGRAMS ARE NEEDED.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW011989

PUBLICATION DATE: JAN 85

TITLE: STUDY OF THE FUTURE FEDERAL ROLE IN MUNICIPAL WASTEWATER TREATMENT. REPORT TO THE ADMINSTRATOR: APPENDICES.

DESCRIPTOR: *CORRESPONDENCE; *CURRENT NEEDS; *FACILITIES; *FINANCING; *FUNDING; *FEDERAL ROLE; *FUTURE NEEDS; *LOCAL

ROLE; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *REPORTS; *STATE ROLE; *USEPA; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 428P. PRICE: $26.68

ABSTRACT: THIS PUBLICATION PROVIDES APPENDICES TO THE STUDY OF THE FUTURE FEDERAL ROLE IN MUNICIPAL WASTEWATER TREATMENT (EW 011 983). INCLUDED ARE A VARIETY OF REPORTS, CORRESPONDENCE, AND INTERNAL EPA STUDIES.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW011991

TITLE: BIOAUGMENTATION: ASSESSING THE POSSIBILITIES.

PERSONAL AUTHOR: DAVIS, LOIS T.

DESCRIPTOR: *BIOAUGMENTATION; *BIOLOGICAL TREATMENT; *INDUSTRIAL WASTES; *OPERATIONS (WASTEWATER); *TECHNOLOGY; *WASTEWATER TREATMENT

ABSTRACT: DESCRIBED IS THE USE OF BIOAUGMENTATION IN WASTEWATER FROM A CHEMICAL PLANT AND FROM A PHARMACEUTICAL COMPANY.

AVAILABILITY: WATERWORLD NEWS

IRIS ACCESSION NUMBER: EW011992

TITLE: PREVENTING BACKFLOW IN FIRE-PROTECTION SYSTEMS.

PERSONAL AUTHOR: BREWER, JOHN

DESCRIPTOR: *BACKFLOW; *CROSS-CONNECTIONS; *EQUIPMENT; *FIRE SPRINKLER SYSTEMS; *PIPES; *SPRINKLER SYSTEMS; *VALUES; *WATER PIPES

ABSTRACT: DESCRIBED IS THE USE OF DOUBLE-CHECK DETECTOR-CHECK (DCDC) DEVICES TO PREVENT BACKFLOW IN FIRE PROTECTION SYSTEMS.

AVAILABILITY: WATERWORLD NEWS

IRIS ACCESSION NUMBER: EW011993

TITLE: ULTRAFILTRATION CASEBOOK.

PERSONAL AUTHOR: HALVERSON, DAVID

DESCRIPTOR: *DRINKING WATER; *MEMBRANE SEPARATION PROCESSES; *MEMBRANES; *OPERATIONS (WATER); *ULTRAFILTRATION; *WATER TREATMENT

ABSTRACT: DESCRIBED ARE ULTRAFILTRATION CONFIGURATIONS USED IN WATER TREATMENT APPLICATIONS.

AVAILABILITY: WATERWORLD NEWS

IRIS ACCESSION NUMBER: EW011996

PUBLICATION DATE: 85

TITLE: DENVER'S SEVEN DECADES OF EXPERIENCE WITH CHLORAMINATION.

PERSONAL AUTHOR: DICE, JACK C.

DESCRIPTOR: *CASE STUDIES; *CHLORAMINES; COLORADO; *DISINFECTION; *DRINKING WATER; MAINTENANCE; MANAGEMENT; MONITORING; *OPERATIONS (WATER); *WATER TREATMENT; WATER QUALITY; WATER RESOURCES

DESCRIPTIVE NOTE: 34-37P.

ABSTRACT: HIGH QUALITY SOURCE WATERS PLUS CONSTANT MONITORING ARE KEYS TO THE SUCCESSFUL USE OF CHLORAMINES. REPORTED ARE THE DENVER WATER DEPARTMENT'S EXPERIENCES OVER THE PAST 70 YEARS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N1

IRIS ACCESSION NUMBER: EW011997

PUBLICATION DATE: 85

TITLE: CONVERTING FROM CHLORINE TO CHLORAMINES: A CASE STUDY.

PERSONAL AUTHOR: KREFT, PETER; AND OTHERS

DESCRIPTOR: *CASE STUDIES; *CHLORAMINES; *CHLORINATION; *CALIFORNIA; *DISINFECTION; *DRINKING WATER; *MANAGEMENT; *OPERATIONS (WATER); *TIMES; *WATER TREATMENT

DESCRIPTIVE NOTE: 38-43P.

ABSTRACT: DESCRIBED IS THE PREPARATORY WORK NECESSARY BEFORE CHANGING FROM CHLORINE DISINFECTION TO CHLORAMINES.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N1

IRIS ACCESSION NUMBER: EW011998

PUBLICATION DATE: 85

TITLE: STATE REGULATION OF CHLORAMINATION.

PERSONAL AUTHOR: HACK, DAVID J.

DESCRIPTOR: *CHLORAMINATION; *CHLORAMINES; *DISINFECTION; DRINKING WATER; *OPERATIONS (WATER); *POLICIES; *REGULATIONS; *SURVEYS; *STATE REGULATIONS; *WATER TREATMENT

DESCRIPTIVE NOTE: 46-49P.

ABSTRACT: STATE REGULATORY AGENCIES HAVE DEVELOPED CHLORAMINATION POLICIES THAT REFLECT CIRCUMSTANCES AND EXPERIENCE. THIS ARTICLE PRESENTS THE RESULTS OF A SURVEY INTO THE PRACTICE OF CHLORAMINATION IN US STATES AND TERRITORIES.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N1

IRIS ACCESSION NUMBER: EW011999

PUBLICATION DATE: 85

TITLE: BLENDING CHLORAMINATED AND CHLORINATED WATERS.

PERSONAL AUTHOR: BARRETT, SYLVIA E.; AND OTHERS

DESCRIPTOR: BLENDING; *CALIFORNIA; *CHLORINATION; CHLORAMINES; *CHLORAMINATION; *DISINFECTION; *DRINKING WATER; *OPERATIONS (WATER); *PERFORMANCE EVALUATION; *WATER TREATMENT

DESCRIPTIVE NOTE: 50-61P.

ABSTRACT: DESCRIBED ARE WATER TREATMENT PRACTICES IN SOUTHERN CALIFORNIA. BLEND-RESIDUAL CURVES WERE USED TO STUDY THE EFFECTS OF BLENDING CHLORAMINATED AND CHLORINATED WATERS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N1

IRIS ACCESSION NUMBER: EW012000

PUBLICATION DATE: 85

TITLE: TECHNICAL NOTE: MONOCHLORAMINE REMOVAL FROM WATER BY ACTIVATED CARBON.

PERSONAL AUTHOR: KOMORITA, JOHN D.; SNOEYINK, VERNON L.

DESCRIPTOR: *ACTIVATED CARBON; *CARBON; *CHLORAMINES; *DISINFECTION; *DRINKING WATER; *OPERATIONS (WATER); *RESEARCH REPORTS; *WATER TREATMENT

DESCRIPTIVE NOTE: 62-64P.

ABSTRACT: REPORTED ARE THE RESULTS OF A STUDY CONDUCTED TO DETERMINE THE EFFECT OF ACTIVATED CARBON ON MONOCHLORAMINE. THE SMALLER THE CARBON PARTICLE SIZE AND THE LONGER THE CONTACT TIME, THE GREATER WAS THE LIFE OF THE CARBON FOR DESTRUCTION OF MONOCHLORAMINE.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N1

IRIS ACCESSION NUMBER: EW912001

PUBLICATION DATE: 83

TITLE: APPLYING ANALYTICAL TECHNIQUES TO SOLVE GROUNDWATER CONTAMINATION PROBLEMS.

PERSONAL AUTHOR: SUFFET, I. H. (MEL)

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CASE STUDIES; CONTAMINATION; *DRINKING WATER; CHEMICALS; *GROUNDWATER; *OPERATIONS (WATER); *WATER QUALITY; *WATER RESOURCES; *WATER TREATMENT

DESCRIPTIVE NOTE: 65-72P.

ABSTRACT: CASE STUDIES OF SOLUTIONS FOR TREATING CONTAMINATED GROUNDWATER ILLUSTRATE THE PRACTICAL APPLICATION OF CONTEMPORARY ANALYTICAL TECHNIQUES.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N1

IRIS ACCESSION NUMBER: EW912002

PUBLICATION DATE: 83

TITLE: ELIMINATING EXCESS VALVES IN FIRE SPRINKLER SYSTEMS.

PERSONAL AUTHOR: BREWER, JOHN

DESCRIPTOR: *CROSS CONNECTION CONTROL; *EQUIPMENT; *FIRE SPRINKLER SYSTEMS; *SPRINKLER SYSTEMS; *VALVES; *WATER PIPES

DESCRIPTIVE NOTE: 4-3P.

ABSTRACT: DISCUSSED IS THE USE OF CHECK VALVES IN FIRE SPRINKLER SYSTEMS AND REDUNDANCY THAT CAN OCCUR. USE OF THE DOUBLE-CHECK DETECTOR-CHECK (DCDC) TO REDUCE THE EXCESS VALVES IS DISCUSSED.

AVAILABILITY: BACKFLOW PREVENTION; V2 N1

IRIS ACCESSION NUMBER: EW912010

PUBLICATION DATE: 83

TITLE: LEARNING HOW TO LEARN.

PERSONAL AUTHOR: CARLISLE, KENNETH E.

DESCRIPTOR: *EVALUATION; *LEARNING; *LEARNING STRATEGIES; *LEARNING SKILLS; *SKILL DEVELOPMENT; *TRAINING

DESCRIPTIVE NOTE: 75-80P.

ABSTRACT: TRAINING PROGRAMS OFTEN DO NOT CONSIDER THAT TRAINEES DO NOT KNOW HOW TO LEARN. DESCRIBED IS A SHORT COURSE THAT WAS DESIGNED TO EVALUATE TRAINEES' LEARNING ABILITY AND UPGRADE THEIR SKILLS.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V39 N3

IRIS ACCESSION NUMBER: EW012011

PUBLICATION DATE: 85

TITLE: A CHECKLIST FOR PLANNING SUCCESSFUL TRAINING PROGRAMS.

PERSONAL AUTHOR: CAFFARELLA, ROSEMARY S.

DESCRIPTOR: *EVALUATION; *INSTRUCTION; *PLANNING; *TRAINING; *TRAINING PROGRAMS

DESCRIPTIVE NOTE: 81-83P.

ABSTRACT: THIS ARTICLE PROVIDES A CHECKLIST FOR PLANNING SUCCESSFUL TRAINING PROGRAMS.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V39 N3

IRIS ACCESSION NUMBER: EW012012

PUBLICATION DATE: 85

TITLE: PURE O2 RETROFIT DOUBLES PLANT'S CAPACITY.

PERSONAL AUTHOR: DUNHON, KIP; BUCHANAN, STEVE

DESCRIPTOR: *COMPLIANCE; *FACILITIES; *OPERATIONS (WASTEWATER); *OXYGEN DIFFUSION SYSTEMS; *RETROFITTING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 22-24P.

ABSTRACT: RETROFITTING A PURE OXYGEN DIFFUSION SYSTEM TO A PLANT THAT WAS LABORING TO PROCESS A THROUGHPUT 50 PERCENT OVER ITS DESIGN CAPACITY WAS THE MAIN SEGMENT OF AN UPGRADE PROJECT. THIS ARTICLE DESCRIBES THE PROJECT.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N2

IRIS ACCESSION NUMBER: EW012013

PUBLICATION DATE: 85

TITLE: PRIVATIZATION NEEDS THE PROFESSIONAL APPROACH.

PERSONAL AUTHOR: WESTERHOFF, GARRET P.

DESCRIPTOR: *FACILITIES; *FUNDING; *ECONOMICS; *OPERATIONS (WATER); *OPERATIONS (WASTEWATER); *PRIVATIZATION; *WATER TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 25-28P.

ABSTRACT: WITH FEDERAL SUPPORT ENDING, THE FUNDING NEEDED FOR CONTINUING CONSTRUCTION OF WATER/WASTEWATER FACILITIES

IS GOING TO HAVE TO BE PROVIDED BY OTHER MEANS. PRIVATIZATION IS ONE OPTION; ITS USE REQUIRES UNDERSTANDING AND CAREFULLY PLANNED MANAGEMENT. THIS ARTICLE CONSIDERS PRINIC9PAL ELEMENTS AND KEYS TO SUCCESS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N2

IRIS ACCESSION NUMBER: EW012014

PUBLICATION DATE: 83

TITLE: WHAT TO LOOK FOR IN CONTRACT SERVICE FIRMS.

PERSONAL AUTHOR: CALLEGARI, WILLIAM A.

DESCRIPTOR: *ADMINISTRATION; *CONTRACT SERVICES; *FACILITIES; *MAINTENANCE; *MANAGEMENT; *OPERATIONS (WATER); *OPERATIONS (WASTEWATER); *WATER TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 29-31P.

ABSTRACT: CONTRACT SERVICE FIRMS ARE IN BUSINESS TO MAKE A PROFIT BY SELLING A BROAD RANGE OF MANAGEMENT SKILLS TO THEIR CLIENTS. MUNICIPAL MANAGERS CAN DEFINITELY BENEFIT BY USING THEM, BUT SHOULD KNOW EXACTLY WHAT THESE FIRMS HAVE TO OFFER. THIS ARTICLE DESCRIBES A VARIETY OF CONTRACT SERVICES.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N2

IRIS ACCESSION NUMBER: EW012015

PUBLICATION DATE: 83

TITLE: COMPUTERIZATION CAN BE PAINLESS AND SUCCESSFUL.

PERSONAL AUTHOR: BEAR, ARTHUR E.

DESCRIPTOR: *BILLINGS; *COMPUTER APPLICATIONS; *DATA COLLECTION; *MUNICIPALITIES; *UTILITIES

DESCRIPTIVE NOTE: 32-33P.

ABSTRACT: DESCRIBED IS THE COMPUTERIZATION OF SEVERAL MUNICIPAL SERVICES OF A TOWNSHIP MUNICIPAL AUTHORITY IN PENNSYLVANIA.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N2

IRIS ACCESSION NUMBER: EW012016

PUBLICATION DATE: 83

TITLE: MAINTENANCE MANAGEMENT IN A SPECIAL KIND OF TREATMENT PLANT.

PERSONAL AUTHOR: LARSON, TERRY R.; SEDMAK, KENNETH L.

DESCRIPTOR: *AQUARIA; *COMPUTER APPLICATIONS; *ILLINOIS; *MAINTENANCE; *OPERATIONS (WATER); *WATER QUALITY

DESCRIPTIVE NOTE: 34-33P.

ABSTRACT: DESCRIBED ARE OPERATIONS OF THE JOHN G. SHEDD AQUARIUM IN CHICAGO.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N2

IRIS ACCESSION NUMBER: EW012017

PUBLICATION DATE: 85

TITLE: NITRATE CONTAMINATION: PUBLIC AWARENESS.

PERSONAL AUTHOR: LEMLEY, A. T.; AND OTHERS

DESCRIPTOR: *DRINKING WATER; *NEW YORK; *NITRATES; *PUBLIC HEALTH; *PUBLIC PARTICIPATION; *SURVEYS; *WATER QUALITY

DESCRIPTIVE NOTE: 34-39P.

ABSTRACT: THE RESULTS OF A SURVEY INDICATE THAT PUBLIC PARTICIPATION IN DECISION-MAKING IS AN EFFECTIVE METHOD OF EDUCATING THE COMMUNITY AND OF SECURING ITS COOPERATION. A COMMUNITY IN NEW YORK WAS SURVEYED REGARDING NITRATE CONTAMINATION IN ITS PUBLIC WATER SUPPLY.

AVAILABILITY: AWWA JOURNAL; V77 N2

IRIS ACCESSION NUMBER: EW012018

PUBLICATION DATE: 85

TITLE: GIARDIA LAMBLIA AND WATER SUPPLY.

PERSONAL AUTHOR: LIN, SHUN DAR

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *DRINKING WATER; *DIAGNOSIS; *GIARDIASIS; *PUBLIC HEALTH; *WATER QUALITY; *WATER TREATMENT

DESCRIPTIVE NOTE: 40-47P.

ABSTRACT: GIARDIASIS IS NOW RECOGNIZED AS THE MOST COMMON IDENTIFIED WATERBORNE INTESTINAL DISEASE IN THE UNITED STATES. THIS ARTICLE DESCRIBES THE MORPHOLOGY AND LIFE CYCLE OF THE CAUSATIVE AGENT, DETECTION OF GIARDIA, AND THE EFFECTIVENISS OF WATER TREATMENT PROCESSES IN REMOVING IT AND THE EPIDEMIOLOGY AND CLINICAL ASPECTS OF GIARDIASIS.

AVAILABILITY: AWWA JOURNAL; V77 N2

IRIS ACCESSION NUMBER: EW012019

PUBLICATION DATE: 83

TITLE: REMOVING GIARDIA CYSTS WITH SLOW SAND FILTRATION.

PERSONAL AUTHOR: BELLAMY, WILLIAM D.; AND OTHERS

DESCRIPTOR: *DRINKING WATER; *GIARDIA; *FILTRATION; *OPERATIONS (WATER); *PERFORMANCE EVALUATION; *SAND FILTRATION; *WATER TREATMENT

DESCRIPTIVE NOTE: 52-60P.

ABSTRACT: STUDIES WERE UNDERTAKEN TO DETERMINE THE EFFICIENCY OF SLOW-RATE SAND FILTERS IN REMOVING GIARDIA CYSTS AND OTHER SUBSTANCES. THE FILTERS REMOVED VIRTUALLY 100 PERCENT OF THE CYSTS, 96 PERCENT OF STANDARD PLATE COUNT BACTERIA, AND 98 PERCENT OF PARTICLES. BECAUSE OF THE EFFICIENCY AND THE PASSIVE NATURE OF SLOW-RATE SAND FILTRATION, THIS TECHNOLOGY IS ESPECIALLY APPROPRIATE FOR SMALL WATER SYSTEMS.

AVAILABILITY: AWWA JOURNAL; V77 N2

IRIS ACCESSION NUMBER: EW012020

PUBLICATION DATE: 83

TITLE: EVALUATING SEDIMENTATION AND VARIOUS FILTER MEDIA FOR REMOVAL OF GIARDIA CYSTS.

PERSONAL AUTHOR: LOGSDON, GARY S.; AND OTHERS

DESCRIPTOR: *DRINKING WATER; *GIARDIA; *FILTRATION; *OPERATIONS (WATER); *PERFORMANCE EVALUATION; *SEDIMENTATION: *WATER QUALITY; *WATER TREATMENT

DESCRIPTIVE NOTE: 61-66P.

ABSTRACT: THE PRIMARY PURPOSE OF THIS STUDY WAS TO EVALUATE THE EFFICIENCY OF SEDIMENTATION AND OF COARSE ANTHRACITE MEDIA FOR REMOVING GIARDIA CYSTS. THE AUTHORS CONCLUDED THAT EFFECTIVE CONTROL OF GIARDIA CYSTS DEPENDS ON INFORMED APPLICATION OF THE MULTIPLE-BARRIER CONCEPT.

AVAILABILITY: AWWA JOURNAL; V77 N2

IRIS ACCESSION NUMBER: EW012021

PUBLICATION DATE: 83

TITLE: REMOVAL OF NEW INDICATORS BY COAGULATION AND FILTRATION.

PERSONAL AUTHOR: HAAS, CHARLES N.; AND OTHERS

DESCRIPTOR: *DRINKING WATER; *COAGULATION; *DISINFECTION; *FILTRATION; *INDICATOR ORGANISMS; *OPERATIONS (WATER); *WATER QUALITY; *WATER TREATMENT

DESCRIPTIVE NOTE: 67-71P.

ABSTRACT: STUDIES REPORTED INDICATE THAT COAGULATION AND FILTRATION DO NOT REMOVE YEASTS AND ACID-FAST ORGANISMS TO A GREATER EXTENT THAN COLIFORM ORGANISMS. YEASTS AND ACID-FAST ORGANISMS MAY BE MORE VALID INDICATORS OF THE EFFICIENCY OF WATER DISINFECTION THAN THE TRADITIONAL INDICATORS.

AVAILABILITY: AWWA JOURNAL; V77 N2

IRIS ACCESSION NUMBER: EW012022

PUBLICATION DATE: 85

TITLE: BACTERIAL COLONIZATION OF POINT-OF-USE WATER TREATMENT DEVICES.

PERSONAL AUTHOR: GELDREICH, EDWIN E.; AND OTHERS

DESCRIPTOR: *BACTERIA; *DRINKING WATER; *FILTERS; *HOME TREATMENT; *ODOR; *POINT-OF-USE; *TASTE; *WATER QUALITY; *WATER TREATMENT; *WATER SUPPLY

DESCRIPTIVE NOTE: 72-80P.

ABSTRACT: POINT-OF-USE WATER TREATMENT DEVICES WERE INVESTIGATED TO IDENTIFY ORGANISMS THAT MAY GROW IN THESE FILTERS, RELEASE OF ORGANISMS INTO THE WATER, AND EFFECT OF THE FILTERS. RESULTS ARE REPORTED.

AVAILABILITY: AWWA JOURNAL; V77 N2

IRIS ACCESSION NUMBER: EW012023

PUBLICATION DATE: 84

TITLE: RECYCLING OF SOLID WASTES.

PERSONAL AUTHOR: LOHANI, B. N.; AND OTHERS

DESCRIPTOR: *COMPOSTING; *DEVELOPING COUNTRIES; *ENERGY CONSERVATION; *ENVIRONMENT; *NATURAL RESOURCES; *RECYCLING; *SOLID WASTES; *SURVEYS; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 1-140P.

ABSTRACT: THIS REVIEW IS DESIGNED TO PRESENT THE STATUS OF RECYCLING OF SOLID WASTES, AND THE RELEVANCE AND APPLICABILITY OF SUCH RECYCLING IN DEVELOPING COUNTRIES.

AVAILABILITY: ENVIRONMENTAL SANITATION REVIEWS; V13/14

IRIS ACCESSION NUMBER: EW012024

PUBLICATION DATE: 85

TITLE: THE BIG CHALLENAGE OF SMALL WATER SYSTEMS.

PERSONAL AUTHOR: SHELSTAD, MERLIN J.; BENNETT, JEFFREY R.

DESCRIPTOR: *ADMINISTRATION; *DRINKING WATER; *ECONOMICS; *MANAGEMENT; *OPERATIONS (WATER); *PLANNING; *POLICIES; SURVEYS; *TECHNOLOGY; *WATER TREATMENT

DESCRIPTIVE NOTE: 34-38P.

ABSTRACT: DESCRIBED ARE SOME OF THE PROBLEMS OF SMALL WATER SYSTEMS AND SOME POSSIBLE SOLUTIONS.

AVAILABILITY: AMERICAN CITY AND COUNTY; V100 N2

IRIS ACCESSION NUMBER: EW012025

PUBLICATION DATE: 85

TITLE: TRAINING: THE BRIDGE BETWEEN TREATMENT AND TECHNOLOGY.

PERSONAL AUTHOR: QUINN, BARBARA

DESCRIPTOR: *OPERATIONS (WASTEWATER); *PERSONNEL; *TRAINING; *TRAINING NEEDS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 52-54P.

ABSTRACT: TRAINING IS A CRITICAL NEED FOR WASTEWATER TREATMENT PERSONNEL. TYPES OF TRAINING NEEDED ARE DESCRIBED.

AVAILABILITY: AMERICAN CITY AND COUNTY; V100 N2

IRIS ACCESSION NUMBER: EW012026

PUBLICATION DATE: 85

TITLE: NEW IDEAS RESHAPING TREATMENT TECHNOLOGIES.

PERSONAL AUTHOR: LORENZ, WILLIAM T.

DESCRIPTOR: *CONTRACT SERVICES; *COSTS; *ECONOMICS; *FINANCING; *MANAGEMENT; *OPERATIONS (WASTEWATER); *TECHNOLOGY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 56-62P.

ABSTRACT: TO MEET THE DEMANDS FOR COMMUNITY WASTEWATER TREATMENT NEEDS, PUBLIC OFFICIALS ARE EXAMINING NEW TECHNOLOGIES AND ALTERNATIVE FINANCING PLANS. SEVERAL TECHNOLOGIES AND ALTERNATIVE PLANS ARE IDENTIFIED.

AVAILABILITY: AMERICAN CITY COUNTY; V100 N2

IRIS ACCESSION NUMBER: EW012027

PUBLICATION DATE: 85

TITLE: OKMULGEE REPRIVATIZES WASTEWATER OPERATIONS.

DESCRIPTOR: *CONTRACT SERVICES; *MANAGEMENT; *MAINTENANCE; *OKLAHOMA; *OPERATIONS (WASTEWATER); *PRIVATIZATION; *PERFORMANCE EVALUATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 62P.

ABSTRACT: DESCRIBED IS A CITY IN OKLAHOMA THAT SELECTED A PRIVATE FIRM TO OPERATE, MAINTAIN, AND MANAGE ITS WASTEWATER TREATMENT FACILITIES.

AVAILABILITY: AMERICAN CITY AND COUNTY; V100 N2

IRIS ACCESSION NUMBER: EW012028

PUBLICATION DATE: 84

TITLE: REVERSE OSMOSIS FOR WOOD PRESERVATIVE SPILL CLEANUP.

PERSONAL AUTHOR: WHITTAKER, H.; STRAFORELLI, J. B.

DESCRIPTOR: *CLEANUP; *EQUIPMENT DESCRIPTIONS; *HAZARDOUS MATERIALS; *SPILLS; *WASTE DISPOSAL; *WOOD PRESERVATIVES; *TOXIC SUBSTANCES; *WATER QUALITY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 36-48P.

ABSTRACT: DESCRIBED IS A MOBIL UNIT FOR WOOD PRESERVATIVE SPILL CLEANUP. RESULTS OBTAINED BY USING THE UNIT ARE DESCRIBED.

AVAILABILITY: SPILL TECHNOLOGY NEWSLETTER; V9 N2

IRIS ACCESSION NUMBER: EW012029

PUBLICATION DATE: 85

TITLE: TRAINING'S ROLE IN THE PROCESS OF PLANNED CHANGE.

PERSONAL AUTHOR: JACKSON, CONRAD N.

DESCRIPTOR: *CHANGE PROCESS; *INDIVIDUAL CHANGE; *LEARNING; *ORGANIZATIONAL CHANGE; *TRAINING; *TRANSFER OF LEARNING

DESCRIPTIVE NOTE: 70-74P.

ABSTRACT: PRESENTED IS A SEVEN-STEP MODEL FOR OPTIMIZING LEARNING TRANSFER.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V39 N2

IRIS ACCESSION NUMBER: EW012030

PUBLICATION DATE: 85

TITLE: COMPLIANCE STRATEGY FOR WASTEWATER TREATMENT PLANTS.

DESCRIPTOR: *COMPLIANCE; *OPERATIONS (WASTEWATER); *RECOMMENDATIONS; *REGULATORY AGENCIES; *REGULATIONS;

*WASTEWATER TREATMENT; *WATER QUALITY; *WPCF; *WPCF COMMITTEE REPORTS

DESCRIPTIVE NOTE: 19-21P.

ABSTRACT: THIS IS A REPORT OF THE WPCF PLANT OPERATIONS COMMITTEE. THE COMMITTEE CONSIDERED STRATEGIES FOR BRINGING WASTEWATER TREATMENT PLANTS IN COMPLIANCE. TEN KEY ELEMENTS OF A REGULATORY AGENCY COMPLIANCE STRATEGY WERE IDENTIFIED. THIRTY-EIGHT STATES WERE POLLED REGARDING HOW THEIR COMPLIANCE STRATEGIES RELATED TO THE COMMITTEE'S KEY ELEMENTS. RESULTS ARE REPORTED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N1

IRIS ACCESSION NUMBER: EW012031

PUBLICATION DATE: 85

TITLE: OPERATING PROBLEMS WITH WASTEWATER FILTERS.

PERSONAL AUTHOR: YOUNG, JAMES C.

DESCRIPTOR: *ADVANCED WASTEWATER TREATMENT; *BACKWASHING; *DESIGN; *FILTERS; *FILTER MEDIA; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 22-29P.

ABSTRACT: GRANULAR MEDIA FILTERS FOR TERTIARY TREATMENT OF WASTEWATER HAVE A NUMBER OF OPERATING PROBLEMS. AMONG THESE PROBLEMS ARE (1) SHORT FILTER RUNS, (2) INCOMPLETE SOLIDS WASHOUT AND MUDBALL FORMATION, (3) PLUGGED MEDIA-SUPPORT NOZZLES, SCREENS, AND GRAVEL, AND (4) MEDIA LOSS. THIS PAPER EXPLORES POSSIBLE CAUSES FOR THESE PROBLEMS AND SUGGESTS WAYS TO OVERCOME OR MINIMIZE THEM THROUGH DESIGN MODIFICATIONS OR BETTER OPERATIONS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N1

IRIS ACCESSION NUMBER: EW012032

PUBLICATION DATE: 85

TITLE: NITROGEN REMOVAL IN WASTEWATER STABILIZATION PONDS.

PERSONAL AUTHOR: REED, S. C.

DESCRIPTOR: *MODELS; *NITROGEN; *NITROGEN REMOVAL; *STABILIZATION PONDS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 39-43P.

ABSTRACT: A RATIONAL PROCEDURE TO ESTIMATE NITROGEN REMOVAL IN FACULTATIVE WASTEWATER STABILIZATION PONDS HAS BEEN DEVELOPED AND VALIDATED. THIS PROCEDURE SHOULD BE USEFUL WHEN SYSTEM DESIGN CRITERIA REQUIRES NITROGEN REMOVAL OR NITRIFICATION. IT SHOULD BE PARTICULARLY HELPFUL FOR THE

POND COMPONENT OF LAND TREATMENT SYSTEMS WHEN NITROGEN IS THE LIMITING DESIGN PARAMETER.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N1

IRIS ACCESSION NUMBER: EW012033

PUBLICATION DATE: 85

TITLE: CAPACITY AND CONTROL OF CLARIFIERS AND THICKENERS.

PERSONAL AUTHOR: DIXON, D. CHRISTOPHER

DESCRIPTOR: *ACTIVATED SLUDGE; *CLARIFICATION; *CLARIFIERS; *DESIGN; *OPERATIONS (WASTEWATER); *THICKENERS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 46-52P.

ABSTRACT: THE OPERATIONAL PRINCIPLES OF CLARIFIERS AND THICKENERS ARE REVIEWED AND CAPACITY LIMITATIONS NOTED UNDER THREE HEADINGS: CLARIFICATION, DRAG, AND COMPRESSION. STANDARD THEORY IS COMPARED TO RECENTLY PUBLISHED VARIATIONS, SOME OF WHICH ARE SHOWN TO BE FAULTY.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N1

IRIS ACCESSION NUMBER: EW012034

PUBLICATION DATE: 85

TITLE: AIR DIFFUSER PERFORMANCE IN ACTIVATED SLUDGE AERATION TANKS.

PERSONAL AUTHOR: SEKIZAWA, T.; AND OTHERS

DESCRIPTOR: *ACTIVATED SLUDGE; *AERATORS; *DIFFUSERS; *OXYGEN TRANSFER; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *WASTEWATER TREATMENT; *RESEARCH REPORTS

DESCRIPTIVE NOTE: 53-59P.

ABSTRACT: FACTORS CONTROLLING THE OXYGEN TRANSFER RATE IN CONVENTIONAL ACTIVATED SLUDGE AERATION TANKS WITH SPIRAL LIQUID CIRCULATION CAUSED BY THE AIR-LIFT ACTION OF RISING BUBBLE SWARMS WERE INVESTIGATED BOTH THEORETICALLY AND EXPERIMENTALLY. RESULTS ARE REPORTED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N1

IRIS ACCESSION NUMBER: EW012035

PUBLICATION DATE: 85

TITLE: GROWTH KINETICS OF SPHAEROTILUS SPECIES AND THEIR

SIGNIFICANCE IN ACTIVATED SLUDGE BULKING.

PERSONAL AUTHOR: RICHARD, MICHAEL; AND OTHERS

DESCRIPTOR: *ACTIVATED SLUDGE; *BULKING; *DISSOLVED OXYGEN; *KINETICS; *FILAMENTOUS ORGANISMS; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 68-81P.

ABSTRACT: FILAMENTOUS ORGANISMS IN 89 BULKING SLUDGES WERE IDENTIFIED AND ASSOCIATED WITH CAUSATIVE CONDITIONS: TYPE 1701 AND SPHAEROTILUS NATANS WERE ASSOCIATED WITH LOW DISSOLVED OXYGEN.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N1

IRIS ACCESSION NUMBER: EW012036

PUBLICATION DATE: 85

TITLE: THE BIOLOGICAL REMOVAL OF PHOSPHORUS IN A SEQUENCING BATCH REACTOR.

PERSONAL AUTHOR: MANNING, JOHN F.; IRVINE, ROBERT L.

DESCRIPTOR: *ACTIVATED SLUDGE PROCESS; *BATCH PROCESSES; *BIOLOGICAL PROCESSES; *PHOSPHORUS REMOVAL; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 87-94P.

ABSTRACT: THE PURPOSE OF THIS PAPER IS TO DESCRIBE BIOLOGICAL PHOSPHORUS REMOVAL IN A SEQUENCING BATCH REACTOR (SBR). THE SBR ACTIVATED SLUDGE SYSTEM HAS DEMONSTRATED A STRONG POTENTIAL FOR INCORPORATING ENERGY SAVING MECHANICAL EQUIPMENT AND PROVIDING GROWTH ENVIRONMENTS FOR MICROBIAL POPULATIONS THAT ALLOW STABLE AND RELIABLE OPERATION.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N1

IRIS ACCESSION NUMBER: EW012037

PUBLICATION DATE: 85

TITLE: APPLICATIONS OF FLOW MICROCALORIMETRY TO PROCESS CONTROL IN BIOLOGICAL TREATMENT OF INDUSTRIAL WASTEWATER.

PERSONAL AUTHOR: JO LICOEUR, A. BEAVBIEN

DESCRIPTOR: *ACTIVATED SLUDGE; *BIOLOGICAL WASTE TREATMENT; *HEAT; *INDUSTRIAL WASTES; *MONITORING; *OPERATIONS (WASTEWATER); *PROCESS CONTROL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 95-100P.

ABSTRACT: THIS PAPER ADDRESSES THE APPLICATION OF FLOW MICROCALORIMETRY TO PROCESS CONTROL IN BIOLOGICAL TREATMENT

OF INDUSTRIAL WASTEWATER.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N1

IRIS ACCESSION NUMBER: EW012038

PUBLICATION DATE: 85

TITLE: THE CONTROL OF FILAMENTOUS BACTERIA USING CHLORINE.

PERSONAL AUTHOR: KENT, CECIL M.

DESCRIPTOR: *BACTERIA; *CHLORINE; *FILAMENTOUS BACTERIA; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 6-8P.

ABSTRACT: PROVIDED IS INFORMATION ON THE CONTROL OF FILAMENTOUS BACTERIA WITH CHLORINE.

AVAILABILITY: OPERATIONS FORUM; V2 N2

IRIS ACCESSION NUMBER: EW012039

PUBLICATION DATE: 85

TITLE: COLD WEATHER O AND M.

PERSONAL AUTHOR: REED, SHERWOOD C.; NIEDRINGHAUS, LANDON

DESCRIPTOR: ACTIVATED SLUDGE; *COLD WEATHER; DISINFECTION; DIGESTION; FLOW MEASUREMENT; GRIT REMOVAL; *MAINTENANCE; *OPERATIONS (WASTEWATER); OXIDATION DITCHES; PRELIMINARY TREATMENT; SEDIMENTATION; *TEMPERATURE EFFECTS; *UNIT PROCESSES; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 10-13P.

ABSTRACT: THIS ARTICLE PROVIDES A BRIEF DISCUSSION OF SOME OF THE COLD WEATHER PROBLEMS THAT OCCUR IN VARIOUS UNIT PROCESSES AND SOME OF THE SOLUTIONS VARIOUS PEOPLE HAVE PROVIDED.

AVAILABILITY: OPERATIONS FORUM; V2 N2

IRIS ACCESSION NUMBER: EW012040

PUBLICATION DATE: 85

TITLE: MENASHA MAINTENANCE.

DESCRIPTOR: COLD WEATHER; MAINTENANCE; OPERATIONS (WASTEWATER); SEWERS; *SEWER MAINTENANCE; *TEMPERATURE EFFECTS; *WASTEWATER TREATMENT; *WISCONSIN

DESCRIPTIVE NOTE: 16-17P.

ABSTRACT: DESCRIBED ARE COLD WEATHER OPERATIONS FOR SEWER MAINTENANCE IN A COMMUNITY IN WISCONSIN.

AVAILABILITY: OPERATIONS FORUM; V2 N2

IRIS ACCESSION NUMBER: EW012041

PUBLICATION DATE: 83

TITLE: EFFECTIVE RECORD SYSTEMS FOR MAINTENANCE.

PERSONAL AUTHOR: TROUT, PAUL

DESCRIPTOR: *EQUIPMENT; *MAINTENANCE; *OPERATIONS (WASTEWATER); *RECORD SYSTEMS: *RECORDS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 18-23P.

ABSTRACT: DESCRIBED ARE EFFECTIVE RECORD SYSTEMS FOR MAINTENANCE.

AVAILABILITY: OPERATIONS FORUM; V2 N2

IRIS ACCESSION NUMBER: EW012042

PUBLICATION DATE: 83

TITLE: COMPLYING WITH NPDES PERMIT LIMITS: WHEN IS A VIOLATION A VIOLATION?

PERSONAL AUTHOR: HERRICKS, EDWIN E.; AND OTHERS

DESCRIPTOR: *COMPLIANCE; *LEGAL ISSUES; *LIABILITY; *MONITORING; *MANAGEMENT; *NPDES PERMITS; *SAMPLING; *WASTEWATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 109-113P.

ABSTRACT: THIS ARTICLE DISCUSSES NPDES PERMIT LIMITS AND COMPLIANCE. THE ARTICLE CONSIDERS LIABILITY, MONITORING, VIOLATIONS, AND LEGAL ISSUES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N2

IRIS ACCESSION NUMBER: EW012043

PUBLICATION DATE: 83

TITLE: SLUDGE REDUCTION BY IN-PLANT PROCESS MODIFICATION: NEW YORK CITY'S EXPERIENCES.

PERSONAL AUTHOR: CARRIO, LUIS A.; AND OTHERS

DESCRIPTOR: NEW YORK; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION: *SLUDGE; *SLUDGE REDUCTION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 116-121P.

ABSTRACT: SLUDGE SOLIDS AND VOLUME WERE REDUCED BY SIMPLE IN-PLANT PROCESS VARIATIONS. STUDIES AT SEVEN NEW YORK CITY WASTEWATER TREATMENT PLANTS EVALUATED INNOVATIVE SLUDGE REDUCTION METHODS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N2

IRIS ACCESSION NUMBER: EW012044

PUBLICATION DATE: 85

TITLE: MATERIALS BALANCE IN THE COMPOSTING OF WASTEWATER SLUDGE AS AFFECTED BY PROCESS CONTROL STRATEGY.

PERSONAL AUTHOR: MILLER, F.C.; FINSTEIN, M. S.

DESCRIPTOR: *BIOLOGICAL WASTE TREATMENT; *COMPOSTING; *PERFORMANCE EVALUATION; *PROCESS CONTROL; *SLUDGE; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 122-127P.

ABSTRACT: DESCRIBED IS A COMPARISON OF TWO PROCESS CONTROL STRATEGIES USING MIXTURES OF RAW SLUDGE AND WOODCHIPS IN UNENCLOSED STATIC PILE CONFIGURATIONS. RESULTS ARE REPORTED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N2

IRIS ACCESSION NUMBER: EW012045

PUBLICATION DATE: 85

TITLE: DYNAMIC OPTIMIZATION OF REGIONAL WASTEWATER TREATMENT SYSTEMS.

PERSONAL AUTHOR: KLEMETSON, STANLEY L.; GRENNEY, WILLIAM J.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *COMPUTER APPLICATIONS; *COSTS; *MANAGEMENT; *MODELS; *OPERATIONS (WASTEWATER); *PLANNING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 128-134P.

ABSTRACT: DESCRIBED IS THE WASTEWATER TREATMENT OPTIMIZATION MODEL (WTOM) DEVELOPED TO ANALYZE WASTEWATER TREATMENT NEEDS OF LARGE POPULATION CENTERS OR A GROUP OF SMALL COMMUNITIES. THE MODEL SELECTS THE BEST ALTERNATIVE TREATMENT SYSTEM TO MEET DESIRED WATER QUALITY OBJECTIVES AT THE LOWEST FUTURE DISCOUNTED COSTS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N2

IRIS ACCESSION NUMBER: EW012046

PUBLICATION DATE: 83

TITLE: CHARACTERISTICS OF ACTIVATED SLUDGE EFFLUENTS BEFORE AND AFTER OZONATION.

PERSONAL AUTHOR: WATT, RONALD D.; AND OTHERS

DESCRIPTOR: ACTIVATED CARBON; *ACTIVATED SLUDGE PROCESS; DISSOLVED OXYGEN; *EFFLUENTS; PH; ORGANICS; *OPERATIONS (WASTEWATER); *OZONATION; *PERFORMANCE EVALUATION; *SLUDGE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 157-166P.

ABSTRACT: THIS PAPER REPORTS RESEARCH CONDUCTED TO DETERMINE CHARACTERISTICS OF ACTIVATED SLUDGE EFFLUENTS BEFORE AND AFTER OZONATION. RESULTS ARE REPORTED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N2

IRIS ACCESSION NUMBER: EW012047

PUBLICATION DATE: 83

TITLE: EVALUATION OF A COMMUNITY-BASED INDEX USING BENTHIC INDICATOR-ORGANISMS FOR CLASSIFYING STREAM QUALITY.

PERSONAL AUTHOR: SCHAEFFER, DAVID J.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *AQUATIC BIOTA; *BIOLOGICAL INDICATORS; *ILLINOIS; *PERFORMANCE EVALUATION; *SAMPLING; *STREAMS; *WATER QUALITY

DESCRIPTIVE NOTE: 167-171P.

ABSTRACT: EXAMINED WAS THE PERFORMANCE OF A BIOTIC INDEX TO DETERMINE WATER QUALITY OF STREAMS. THE RESULTS INDICATED THAT THE METHOD PRODUCED INTERNALLY CONSISTENT STREAM CLASSIFICATIONS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N2

IRIS ACCESSION NUMBER: EW012048

PUBLICATION DATE: 85

TITLE: THE WATER QUALITY IMPACTS OF CHLORINATING PAPERMILL EFFLUENTS.

PERSONAL AUTHOR: SHERTZER, RICHARD H.

DESCRIPTOR: BACTERIA; *BIOLOGICAL EFFECTS; *CHLORINATION; *DISINFECTION; *INDUSTRIAL WASTES; *PAPERMILLS; PULP INDUSTRY; PAPER INDUSTRY; *RESEARCH; *WASTEWATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 172-180P.

ABSTRACT: REPORTED IS THE RESULT OF A STUDY TO DETERMINE THE IMPACT OF CHLORINATION OF PAPERMILL EFFLUENCES. EFFLUENT FROM TWO MILLS WAS CHLORINATED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N2

IRIS ACCESSION NUMBER: EW012049

PUBLICATION DATE: 85

TITLE: SELECTED WASTE SITE PUZZLES AND SOLUTIONS.

PERSONAL AUTHOR: POPKIN, BARNEY P.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CASE HISTORIES; *DATA COLLECTION; *GROUNDWATER; *HYDROLOGY; *MONITORING; *WASTE DISPOSAL; *WASTE SITES; *WATER POLLUTION CONTROL; *WATER QUALITY

DESCRIPTIVE NOTE: 34-37P.

ABSTRACT: PRESENTED ARE 12 CASE HISTORIES OF ACTUAL WASTE SITE PUZZLES OR APPARENT ANOMALIES. THE ARTICLE EMPHASIZES PRACTICAL NEEDS FOR MULTIPLE HYPOTHESES, MULTIDISCIPLINARY ANALYSIS, AND OPEN-MINDED APPROACHES TO SOLVE THE PUZZLES. THE ARTICLE INDICATES HOW SOLUTIONS WERE FOUND TO THE SELECTED PUZZLES AND PROVIDES THE SOLUTIONS.

AVAILABILITY: GROUND WATER MONITORING REVIEW; V5 N1

IRIS ACCESSION NUMBER: EW012050

PUBLICATION DATE: 85

TITLE: AN EVALUATION TECHNIQUE FOR GROUND WATER QUALITY BENEATH URBAN RUNOFF RETENTION AND PERCOLATION BASINS.

PERSONAL AUTHOR: NIGHTINGALE, HARRY I.; AND OTHERS

DESCRIPTOR: *EQUIPMENT; *EVALUATION TECHNIQUES; *GROUNDWATER; *MONITORING; SURFACE RUNOFF; *STORM WATER; *SAMPLING; *URBAN AREAS; *WATER QUALITY; *WATER EXTRACTIONS

DESCRIPTIVE NOTE: 43-50P.

ABSTRACT: PRESENTED IS AN EVALUATION TECHNIQUE FOR DETERMINING GROUND WATER QUALITY BENEATH URBAN RUNOFF RETENTION AND PERCOLATION BASINS.

AVAILABILITY: GROUNDWATER MONITORING REVIEW; V5 N1

IRIS ACCESSION NUMBER: EW012051

PUBLICATION DATE: 83

TITLE: PRIMARY EFFLUENT FILTRATION: THE WARMINSTER EXPERIENCE.

PERSONAL AUTHOR: BECKER, SAM; GARZONETTI, GARY A.

DESCRIPTOR: *COSTS; *FILTRATION; *EFFLUENTS; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *TECHNOLOGY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 54-56P.

ABSTRACT: DESCRIBED IS A WASTEWATER TREATMENT PLANT IN PENNSYLVANIA THAT PHYSICALLY FILTERS PRIMARY CLARIFIED EFFLUENTS AND REDUCES SS AND BODS. THE COST EFFECTIVENESS AND SYSTEM ADVANTAGES ARE DISCUSSED.

AVAILABILITY: PUBLIC WORKS; V116 N2

IRIS ACCESSION NUMBER: EW012052

PUBLICATION DATE: 85

TITLE: USE OF THE CONVEYANCE METHOD IN DESIGN AND ANALYSIS OF PRESSURIZED EFFLUENT DISTRIBUTION SYSTEMS.

PERSONAL AUTHOR: VOSSE, PATRICK

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CONVEYANCE METHOD; *DESIGN; *EFFLUENT DISTRIBUTION SYSTEMS; *ONSITE SEWAGE DISPOSAL; *PRESSURIZED SYSTEMS; *SEWAGE; *SEWAGE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 180-183P.

ABSTRACT: A PROCEDURE IS PRESENTED FOR DESIGNING A PRESSURIZED EFFLUENT DISTRIBUTION SYSTEM USING THE CONVEYANCE METHOD TO DETERMINE PRESSURE BALANCE IN PRESSURIZED EFFLUENT DISTRIBUTION SYSTEMS.

AVAILABILITY: JOURNAL OF ENVIRONMENTAL HEALTH; V47 N4

IRIS ACCESSION NUMBER: EW012053

PUBLICATION DATE: 85

TITLE: EFFECT OF SOIL DEPTH ON WASTEWATER RENOVATION.

PERSONAL AUTHOR: KHANBILVARDI, REZA M.; LONG, DAVID A.

DESCRIPTOR: *DEPTH; *ONSITE WASTEWATER DISPOSAL; *PERCOLATED WASTEWATER; *RESEARCH REPORTS; *SOIL; *WASTEWATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 184-83P.

ABSTRACT: REPORTED ARE THE RESULTS OF A SOIL COLUMN STUDY

TO GATHER INFORMATION CONCERNING THE RENOVATION OF PERCOLATED WASTEWATER AT VARIOUS DEPTHS OF LIMESTONE SOIL.

AVAILABILITY: JOURNAL OF ENVIRONMENTAL HEALTH; V47 N4

IRIS ACCESSION NUMBER: EW012061

PUBLICATION DATE: AUG 84

TITLE: HEALTH ASSESSMENT DOCUMENT FOR CHROMIUM. FINAL REPORT.

PERSONAL AUTHOR: BASU, D.; AND OTHERS

DESCRIPTOR: *CHROMIUM; *ENVIRONMENT; *HEALTH EFFECTS; *METALS; *PUBLIC HEALTH; *RESEARCH REPORTS; *RISK ASSESSMENT

DESCRIPTIVE NOTE: 357P. PRICE CODE: PC A16/MFA01. ORDER NO.: PB85-11905/WEP

ABSTRACT: THE FULL DOCUMENT REPRESENTS A COMPREHENSIVE DATA BASE THAT CONSIDERS ALL SOURCES OF CHROMIUM IN THE ENVIRONMENT, THE LIKELIHOOD FOR ITS EXPOSURE TO HUMANS, AND THE POSSIBLE CONSEQUENCES TO MAN AND LOWER ORGANISMS FROM ITS ABSORPTION. THIS INFORMATION IS INTEGRATED INTO A FORMAT THAT CAN SERVE AS THE BASIS FOR QUALITATIVE AND QUANTITATIVE RISK ASSESSMENTS, WHILE AT THE SAME TIME IDENTIFYING GAPS IN OUR KNOWLEDGE THAT LIMIT ACCURATE HEALTH ASSESSMENT. THUS, IT IS EXPECTED THAT THIS DOCUMENT MAY SERVE THE INFORMATION NEEDS OF OTHER GOVERNMENT AGENCIES AND THE PRIVATE SECTOR THAT MAY BE INVOLVED IN DECISION MAKING AND REGULATORY ACTIVITIES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012064

PUBLICATION DATE: SEP 84

TITLE: BEST MANAGEMENT PRACTICE FOR AGRICULTURAL NONPOINT SOURCE CONTROL, 4. PESTICIDES.

PERSONAL AUTHOR: MAAS, R. P.; AND OTHERS

DESCRIPTOR: *AGRICULTURE; *BEST MANAGEMENT PRACTICES; *NONPOINT SOURCE CONTROL; *PESTICIDES; *POLLUTION CONTROL; *WATER QUALITY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 96P. PRICE CODE: PC A05/MF A01. ORDER NO.: PB85-114247/WEP

ABSTRACT: THE OVERALL PURPOSE OF THIS REPORT IS TO IDENTIFY AND EVALUATE BEST MANAGEMENT PRACTICES (BMPS) FOR REDUCING PESTICIDE CONTAMINATION OF AQUATIC SYSTEMS FROM AGRICULTURAL NONPOINT SOURCES (NPS). SINCE THE 1950'S PESTICIDE INPUTS TO WATER RESOURCES HAVE BECOME INCREASINGLY RECOGNIZED AS A SERIOUS, PERVASIVE AND YET LARGELY UNQUANTIFIED PROBLEM. THE REPORT REVIEWS DOCUMENTATION OF PESTICIDE-RELATED WATER RESOURCE USE IMPAIRMENTS, AND EXAMINES THE TRANSPORT MODES

OF FIVE MAJOR PESTICIDE CLASSES. THIS INFORMATION IS USED TO DEVELOP ESTIMATES OF PESTICIDE INPUT REDUCTIONS WHICH CAN BE ACCOMPLISHED BY VARIOUS CLASSES OF BMPS (SOIL AND WATER CONSERVATION PRACTICES, IMPROVEMENTS IN APPLICATION TECHNIQUES, AND INTEGRATED PEST MANAGEMENT PROGRAMS).

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EV012065

PUBLICATION DATE: 84

TITLE: SEWAGE SLUDGE PRETREATMENT AND DISPOSAL. DECEMBER 1981-NOVEMBER, 1984.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; COMPOSTING; ENERGY RECOVERY; DISINFECTION; LAND DISPOSAL; DEWATERING; DIGESTION, *OPERATIONS (WASTEWATER); *PRETREATMENT; *SEWAGE SLUDGE; *SLUDGE; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 176P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-850980/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING TECHNIQUES AND EQUIPMENT UTILIZED IN THE PRETREATMENT PROCESSES AND DISPOSAL OF SEWAGE SLUDGES. TOPICS INCLUDE RESOURCE AND ENERGY RECOVERY OPERATIONS, LAND DISPOSAL, COMPOSTING, OCEAN DISPOSAL, AND INCINERATION. DIGESTION, DEWATERING, AND DISINFECTION ARE AMONG THE PRETREATMENT PROCESSES DISCUSSED. ENVIRONMENTAL ASPECTS, INCLUDING THE EFFECTS ON SOILS, PLANTS, AND ANIMALS ARE ALSO PRESENTED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 193 CITATIONS, 100 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EV012066

PUBLICATION DATE: SEP 84

TITLE: VALUE ENGINEERING FOR WASTEWATER TREATMENT WORKS.

DESCRIPTOR: *COSTS; *ENGINEERING; *FACILITIES; *MAINTENANCE; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *VALUE ENGINEERING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 129P. PRICE: 36.45

ABSTRACT: THIS DOCUMENT PROVIDES USERS WITH STATE-OF-THE-ART GUIDANCE FOR CONDUCTING VALUE ENGINEERING ON WASTEWATER TREATMENT PROJECTS. WITH APPLICATION OF THE VALUE ENGINEERING PROCESS DESCRIBED IN THIS DOCUMENT, CAPITAL COST SAVINGS OF FIVE TO TEN PERCENT PLUS ADDITIONAL OPERATION AND MAINTENANCE COST SAVINGS CAN BE ACHIEVED FOR INDIVIDUAL WASTEWATER TREATMENT FACILITIES.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE

CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012068

PUBLICATION DATE: 75

TITLE: METHODOLOGIES FOR ANALYZING PUBLIC POLICIES.

PERSONAL AUTHOR: SCIOLI, FRANK P., JR.; COOK, THOMAS J.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *DESIGN; *MEASUREMENT; *PUBLIC POLICY; *POLICIES; *RESEARCH METHODS; *STATISTICS

DESCRIPTIVE NOTE: 180P.

ABSTRACT: THE OBJECTIVE OF THIS BOOK IS TO IMPROVE THE CONDUCT OF RESEARCH IN PUBLIC POLICY ANALYSIS. SECTIONS ARE INCLUDED ON MEASUREMENT, DESIGN, AND ANALYSIS.

AVAILABILITY: LEXINGTON BOOKS, D. C. HEALTH AND COMPANY, LEXINGTON, MA

IRIS ACCESSION NUMBER: EW012069

PUBLICATION DATE: 85

TITLE: EMISSIONS TRADING - AN EXERCISE IN REFORMING POLLUTION POLICY.

PERSONAL AUTHOR: TIETENBERG, T. H.

DESCRIPTOR: *AIR POLLUTION CONTROL; *CLEAN AIR ACT; *COSTS; *ECONOMICS; *EMISSIONS; *EMISSION TRADING PROGRAMS; *ENFORCEMENT; *PERMITS; *POLICIES; *REGULATIONS; *RECOMMENDATIONS; *USEPA; WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 231P.

ABSTRACT: IN THIS BOOK THE AUTHOR ATTEMPTS TO EVALUATE THE EMISSIONS TRADING PROGRAM USING TWO DIFFERENT BENCHMARKS: (1) DID ITS INTRODUCTION IMPROVE UPON THE POLICY THAT PRECEDED IT? AND (2) HOW CLOSELY DID IT FULFILL THE BASIC OBJECTIVES WHICH MOTIVATED THE PROGRAM? SECTIONS ARE INCLUDED ON THE CONCEPTUAL FRAMEWORK, THE POTENTIAL FOR COST SAVINGS, THE SPATIAL DIMENSION, DISTRIBUTING THE FINANCIAL BURDEN, MARKET POWER, THE TEMPORAL DIMENSION, ENFORCEMENT, AND EVALUATION AND PROPOSAL FOR FUTHER REFORM.

AVAILABILITY: RESOURCES FOR THE FUTURE, INC., 1755 MASSACHUSETTS AVENUE, N.W. WASHINGTON, DC 20036

IRIS ACCESSION NUMBER: EW012070

PUBLICATION DATE: 83

TITLE: DIRECTORY OF ORGANIZATIONS INVOLVED IN COMMUNITY EDUCATION AND PARTICIPATION IN WATER SUPPLY AND SANITATION.

DESCRIPTOR: *DEVELOPING COUNTRIES; *COMMUNITY EDUCATION; *DIRECTORIES; *ORGANIZATIONS; *PUBLIC PARTICIPATION; *SANITATION; *SURVEYS; *WATER SUPPLY

DESCRIPTIVE NOTE: 165P.

ABSTRACT: THIS PUBLICATION PRESENTS DATA ON 124 ORGANIZATIONS FROM 56 COUNTRIES AND 10 INTERNATIONAL ORGANIZATIONS REGARDING THEIR WORK ON COMMUNITY EDUCATION AND PARTICIPATION IN THE FIELD OF WATER SUPPLY AND SANITATION IN DEVELOPING COUNTRIES.

AVAILABILITY: INTERNATIONAL REFERENCE CENTER FOR COMMUNITY WATER SUPPLY AND SANITATION, WHO COLLABORATING CENTER, P.O. BOX 5500, 2280 HM RIJSWIJK, NETHERLANDS

IRIS ACCESSION NUMBER: EW012071

PUBLICATION DATE: 84

TITLE: BIOLOGICAL TREATMENT PROCESS CONTROL: REVIEW OF SOLIDS HANDLING - INSTRUCTOR'S GUIDE.

PERSONAL AUTHOR: CARNEGIE, JOHN W.

DESCRIPTOR: *BIOLOGICAL TREATMENT; *INSTRUCTIONAL MATERIALS; *INSTRUCTOR'S GUIDES; LABORATORY PROCEDURES; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *SLUDGE; *SOLID WASTES; *TRAINING; *TEACHING GUIDES; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 20P. PRICE: $2.20 FROM EQ/IRC. CONTACT LINN-BENTON FOR THEIR PRICE.

ABSTRACT: THIS UNIT (WHICH CONSISTS OF A SINGLE LESSON) SUMMARIZES AND REVIEWS MOST OF THE SOLIDS HANDLING PROCESSES IN COMMON USE IN MUNICIPAL TREATMENT PLANTS. THE INSTRUCTOR'S GUIDE FOR THE UNIT INCLUDES: (1) AN OVERVIEW OF THE LESSON; (2) LESSON PLAN; (3) LECTURE OUTLINE (KEYED TO A SET OF 72 SLIDES); (4) STUDENT WORKSHEET (WITH ANSWERS); AND (5) TWO COPIES OF A FINAL QUIZ (WITH AND WITHOUT ANSWERS). AFTER COMPLETING THE UNIT STUDENTS SHOULD BE ABLE TO BRIEFLY DESCRIBE HOW EACH SOLIDS HANDLING PROCESS WORKS AND DESCRIBE ITS MAIN FUNCTION WITHIN THE SOLIDS HANDLING PROGRAM. IN ADDITION, STUDENTS SHOULD BECOME AWARE OF THE CRITICAL IMPORTANCE OF SOLIDS HANDLING TO THE OVERALL OPERATION AND EFFECTIVENESS OF THE TREATMENT PLANT.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212 OR LINN-BENTON COMMUNITY COLLEGE, ALBANY, OR

IRIS ACCESSION NUMBER: EW012072

PUBLICATION DATE: 84

TITLE: BIOLOGICAL TREATMENT PROCESS CONTROL: REVIEW OF SOLIDS HANDLING - STUDENT MANUAL.

PERSONAL AUTHOR: CARNEGIE, JOHN W.

DESCRIPTOR: BIOLOGICAL TREATMENT; *INSTRUCTIONAL MATERIALS; LABORATORY PROCEDURES; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *SLUDGE; *SOLID WASTES; *TRAINING; *UNIT PROCESSES; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 16P. PRICE: $1.96 FROM EQ/IRC. CONTACT LINN-BENTON FOR THEIR PRICE.

ABSTRACT: THIS STUDENT MANUAL CONTAINS THE TEXTUAL MATERIAL FOR A SINGLE-LESSON UNIT WHICH SUMMARIZES AND REVIEWS MOST OF THE SOLIDS HANDLING PROCESSES IN COMMON USE IN MUNICIPAL TREATMENT PLANTS. NO ATTEMPT IS MADE TO DETAIL THE THEORY AND OPERATION OF THE PROCESSES. TOPICS DISCUSSED INCLUDE: (1) SOURCES OF SLUDGE; (2) THE IMPORTANCE OF SLUDGE MANAGEMENT; (3) VOLUME REDUCTION; (4) SOLIDS REDUCTION; (5) STABILIZATION; (6) CONDITIONING; AND (7) ULTIMATE DISPOSAL. A LIST OF UNIT OBJECTIVES AND STUDENT WORKSHEET ARE INCLUDED.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212 OR LINN-BENTON COMMUNITY COLLEGE, ALBANY, OR

IRIS ACCESSION NUMBER: EW012073

PUBLICATION DATE: 84

TITLE: BIOLOGICAL TREATMENT PROCESS CONTROL: TRICKLING FILTERS - STUDENT MANUAL.

PERSONAL AUTHOR: RICHWINE, REYNOLD D.

DESCRIPTOR: *BIOLOGICAL TREATMENT; *FILTERS; *INSTRUCTIONAL MATERIALS; LABORATORY PROCEDURES; MICROBIOLOGY; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *TRAINING; *TRICKLING FILTERS; *UNIT PROCESSES; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 25P. PRICE: $2.50 FROM EQ/IRC. CONTACT LINN-BENTON FOR THEIR PRICE.

ABSTRACT: THE TEXTUAL MATERIAL FOR A UNIT ON TRICKLING FILTERS IS PRESENTED IN THIS STUDENT MANUAL. TOPIC AREAS DISCUSSED INCLUDE: (1) TRICKLING FILTER PROCESS COMPONENTS (PRELIMINARY TREATMENT, MEDIA, UNDERDRAIN SYSTEM, DISTRIBUTION SYSTEM, VENTILATION, AND SECONDARY CLARIFIER); (2) OPERATIONAL MODES (STANDARD RATE FILTERS, HIGH RATE FILTERS, ROUGHING FILTERS, FILTER STAGING); (3) TRICKLING FILTER MICROBIOLOGY (BIOMASS, NUTRITIONAL REQUIREMENTS, METABOLISM RATES, GROWTH AND SLOUGHING CYCLE); (4) TRICKLING FILTER PROCESS MONITORING, INCLUDING THE USE OF LABORATORY DATA TO AID IN PLANT OPERATIONS; AND (5) OPERATIONAL PROBLEMS AND SOLUTIONS (FOCUSING ON FILTER FLIES, HIGH EFFLUENT SUSPENDED SOLIDS, HIGH HYDRAULIC LOADING RATES, ICING, IN-PLANT RECYCLE STREAMS, LOW TEMPERATURE WASTEWATER, ODORS, ORIFICE PLUGGING, PONDING, REDUCTION IN BIOLOGICAL OXIDATION DEMAND (BOD) REMOVAL, AND TOXIC LOADINGS). A LIST OF UNIT OBJECTIVES, GLOSSARY OF KEY TERMS, AND STUDENT WORKSHEET ARE INCLUDED.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212 OR

LINN-BENTON COMMUNITY COLLEGE, ALBANY, OR

IRIS ACCESSION NUMBER: EN012074

PUBLICATION DATE: 84

TITLE: BIOLOGICAL TREATMENT PROCESS CONTROL: TRICKLING FILTERS - INSTRUCTOR'S GUIDE.

PERSONAL AUTHOR: RICHWINE, REYNOLD D.

DESCRIPTOR: BIOLOGICAL TREATMENT; FILTERS; INSTRUCTIONAL MATERIALS; INSTRUCTOR'S GUIDES; LABORATORY PROCEDURES; MICROBIOLOGY; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *TEACHING GUIDES; *TRAINING; *TRICKLING FILTERS; *UNIT PROCESSES; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 29P. PRICE: $2.74 FROM EQ/IRC. CONTACT LINN-BENTON FOR THEIR PRICE.

ABSTRACT: THIS INSTRUCTOR'S GUIDE CONTAINS MATERIALS NEEDED FOR TEACHING A TWO-LESSON UNIT ON TRICKLING FILTERS. THESE MATERIALS INCLUDE: (1) AN OVERVIEW OF THE TWO LESSONS; (2) LESSON PLANS; (3) LECTURE OUTLINE (KEYED TO A SET OF SLIDES ACCOMPANYING THE UNIT); (4) OVERHEAD TRANSPARENCY MASTERS; (5) STUDENT WORKSHEET (WITH ANSWERS); AND (6) TWO COPIES OF A FINAL QUIZ (WITH AND WITHOUT ANSWERS). THE FIRST LESSON (STRUCTURE AND THEORY) COVERS AN INTRODUCTION TO TRICKLING FILTERS, COMPONENTS, MODES OF OPERATION, AND THE MICROBIOLOGY OF TRICKLING FILTERS (EMPHASIZING THE FACTORS THAT AFFECT GROWTH). THE SECOND LESSON COVERS THE OPERATION OF TRICKLING FILTERS. THE LABORATORY TESTS RECOMMENDED FOR INFLUENT AND EFFLUENT MONITORING ARE PRESENTED AND RELATED TO THE FACTORS AFFECTING BIOMASS GROWTH. CALCULATIONS REGARDING LOADING, RECIRCULATION, AND EFFICIENCY ARE PRESENTED AND PRACTICED. PLANT OBSERVATION AND MONITORING IS DISCUSSED WITH AN EMPHASIS ON AWARENESS AND IDENTIFICATION OF EXISTING AND POTENTIAL PROBLEMS. FINALLY, A NUMBER OF OPERATIONAL PROBLEMS ARE PRESENTED WITH CORRECTIVE MEASURES RECOMMENDED.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212 OR LINN-BENTON COMMUNITY COLLEGE, ALBANY, OR

IRIS ACCESSION NUMBER: EN012075

PUBLICATION DATE: 84

TITLE: BIOLOGICAL TREATMENT PROCESS CONTROL: FACULTATIVE LAGOONS - STUDENT MANUAL.

PERSONAL AUTHOR: ANDERSEN, LORRI

DESCRIPTOR: *BIOLOGICAL TREATMENT; *FACULTATIVE LAGOONS; *INSTRUCTIONAL MATERIALS; *LAGOONS; LABORATORY PROCEDURES; MICROBIOLOGY; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *SLUDGE; *TRAINING; *UNIT PROCESSES; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 54P. PRICE: $4.24 FROM EQ/IRC. CONTACT LINN-BENTON FOR THEIR PRICE.

ABSTRACT: THE TEXTUAL MATERIAL FOR A UNIT ON FACULTATIVE LAGOONS IS PRESENTED IN THIS STUDENT MANUAL. TOPIC AREAS DISCUSSED INCLUDE: (1) LOADING; (2) MICROBIAL THEORY; (3) STRUCTURE AND DESIGN; (4) PROCESS CONTROL; (5) LAGOON START-UP; (6) DATA HANDLING AND ANALYSIS; (7) LAGOON MAINTENANCE (CONSIDERING VISUAL OBSERVATIONS, POND STRUCTURE, SAFETY, ODOR, RECORDKEEPING, AND PREVENTATIVE MAINTENANCE); AND (8) LAGOON TROUBLESHOOTING (CONSIDERING CAUSES AND SOLUTIONS TO SUCH PROBLEMS AS HIGH LOADING, DECREASING TREND IN PH, EFFLUENT HIGH IN BIOLOGICAL OXIDATION DEMAND, INSECTS, AND ODOR PROBLEMS). A LIST OF UNIT OBJECTIVES, A GLOSSARY OF KEY TERMS, A SHORT LIST OF REFERENCES, AND STUDENT WORKSHEET ARE INCLUDED.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212 OR LINN-BENTON COMMUNITY COLLEGE, ALBANY, OR

IRIS ACCESSION NUMBER: EW012076

PUBLICATION DATE: 84

TITLE: BIOLOGICAL TREATMENT PROCESS CONTROL: FACULTATIVE LAGOONS - INSTRUCTOR'S GUIDE.

PERSONAL AUTHOR: ANDERSEN, LORRI

DESCRIPTOR: *BIOLOGICAL TREATMENT; *FACULTATIVE LAGOONS; *INSTRUCTIONAL MATERIALS; *INSTRUCTOR'S GUIDES; *LAGOONS; MICROBIOLOGY; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *SLUDGE; *TEACHING GUIDES; *TRAINING; *UNIT PROCESSES; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 22P. PRICE: $2.32 FROM EQ/IRC. CONTACT LINN-BENTON FOR THEIR PRICE.

ABSTRACT: THIS INSTRUCTOR'S GUIDE CONTAINS MATERIALS NEEDED TO TEACH A TWO-LESSON UNIT ON THE STRUCTURE AND COMPONENTS OF FACULTATIVE LAGOONS, THE BIOLOGICAL THEORY OF THEIR OPERATION, AND FACTORS AFFECTING THEIR OPERATION. CONTROL TESTING RECOMMENDATIONS, MAINTENANCE GUIDELINES AND TROUBLESHOOTING HINTS ARE ALSO PROVIDED. THESE MATERIALS INCLUDE: (1) AN OVERVIEW OF THE TWO LESSONS; (2) LESSON PLANS; (3) LECTURE OUTLINE (KEYED TO A SET OF SLIDES WHICH ACCOMPANY THE UNIT); (4) STUDENT WORKSHEET (WITH ANSWERS); AND (5) TWO COPIES OF A FINAL QUIZ (WITH AND WITHOUT ANSWERS). THE FIRST LESSON IS A REVIEW OF MICROBIOLOGY, COMPONENTS, AND OPERATIONAL MODES. THE SECOND LESSON COVERS PROCESS CONTROL, MAINTENANCE, AND TROUBLESHOOTING.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212 OR LINN-BENTON COMMUNITY COLLEGE, ALBANY, OR

IRIS ACCESSION NUMBER: EW012077

PUBLICATION DATE: 84

TITLE: BIOLOGICAL TREATMENT PROCESS CONTROL: AERATED LAGOONS - INSTRUCTOR'S GUIDE.

PERSONAL AUTHOR: ANDERSEN, LORRI

DESCRIPTOR: *AERATED LAGOONS; *BIOLOGICAL TREATMENT; *INSTRUCTIONAL MATERIALS; *INSTRUCTOR'S GUIDES; *LAGOONS; LABORATORY PROCEDURES; MICROBIOLOGY; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *TEACHING GUIDES; *TRAINING; *UNIT PROCESSES; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 20P. PRICE: $2.20 FROM EQ/IRC. CONTACT LINN-BENTON FOR THEIR PRICE.

ABSTRACT: THIS UNIT (WHICH CONSISTS OF A SINGLE LESSON) DESCRIBES THE STRUCTURAL AND OPERATIONALLY UNIQUE FEATURES OF AERATED LAGOONS. IN ADDITION, SPECIAL TROUBLESHOOTING AND MAINTENANCE PROBLEMS ARE DISCUSSED. THE INSTRUCTOR'S GUIDE FOR THE UNIT INCLUDES: (1) AN OVERVIEW OF THE LESSON; (2) LESSON PLAN; (3) LECTURE OUTLINE (KEYED TO A SET OF SLIDES USED WITH THE UNIT); (4) STUDENT WORKSHEET (WITH ANSWERS); AND (5) TWO COPIES OF A FINAL QUIZ (WITH AND WITHOUT ANSWERS). THIS UNIT IS HEAVILY DEPENDENT UPON INFORMATION PRESENTED IN THE FACULTATIVE LAGOON UNIT. MUCH OF THE BASIC THEORY AND DESCRIPTION OF SYSTEM COMPONENTS IS THE SAME FOR BOTH PROCESSES, SO THE REDUNDANT INFORMATION IS NOT INCLUDED IN THIS UNIT. THEREFORE, IT IS RECOMMENDED THAT BOTH UNITS BE PRESENTED AS A SET. IF IT IS NECESSARY TO PRESENT ONLY AERATED LAGOONS, MATERIAL FROM THE FACULTATIVE LAGOON UNIT SHOULD BE REFERENCED AND STUDENTS ENCOURAGED TO READ IT AHEAD OF TIME.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212 OR LINN-BENTON COMMUNITY COLLEGE, ALBANY, OR

IRIS ACCESSION NUMBER: EW012078

PUBLICATION DATE: 84

TITLE: BIOLOGICAL TREATMENT PROCESS CONTROL: AERATED LAGOONS - STUDENT MANUAL.

PERSONAL AUTHOR: ANDERSEN, LORRI

DESCRIPTOR: *AERATED LAGOONS; *BIOLOGICAL TREATMENT; *INSTRUCTIONAL MATERIALS; *LAGOONS; LABORATORY PROCEDURES; MICROBIOLOGY; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *TRAINING; *UNIT PROCESSES; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 50P. PRICE: $4.00 FROM EQ/IRC. CONTACT LINN-BENTON FOR THEIR PRICE.

ABSTRACT: THIS STUDENT MANUAL CONTAINS THE TEXTUAL MATERIAL FOR A UNIT WHICH FOCUSES ON THE STRUCTURAL AND OPERATIONALLY UNIQUE FEATURES OF AERATED LAGOONS. TOPIC AREAS DISCUSSED

INCLUDE: (1) CHARACTERISTICS OF COMPLETELY MIXED AERATED LAGOONS; (2) FACULTATIVE AERATED LAGOONS; (3) AERATED OXIDATION PONDS; (4) EFFECTS OF TEMPERATURE ON AERATED LAGOONS; (5) MECHANICAL SURFACE AERATORS; (6) DIFFUSED AIR AERATOR; (7) LAGOON TESTING; (8) DESIGN CONSIDERATIONS; (9) OPERATIONAL CONSIDERATIONS; AND (10) MAINTENANCE. A LIST OF OBJECTIVES, GLOSSARY OF KEY TERMS. LIST OF REFERENCES, AND STUDENT WORKSHEET ARE INCLUDED. IT IS RECOMMENDED THAT THIS UNIT BE PRESENTED TOGETHER WITH THE UNIT ON FACULTATIVE LAGOONS. MUCH OF THE BASIC THEORY AND DESCRIPTION OF SYSTEM COMPONENTS IS THE SAME FOR BOTH PROCESSES; THEREFORE, REDUNDANT INFORMATION PROVIDED IN THE UNIT ON FACULTATIVE LAGOONS IS NOT INCLUDED IN THIS UNIT. IF IT IS NECESSARY TO PRESENT ONLY AERATED LAGOONS, MATERIAL FROM THE FACULTATIVE LAGOON UNIT SHOULD BE REFERENCES AND STUDENTS ENCOURAGED TO READ IT AHEAD OF TIME.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212 OR LINN-BENTON COMMUNITY COLLEGE, ALBANY, OR

IRIS ACCESSION NUMBER: EW012079

PUBLICATION DATE: 84

TITLE: BIOLOGICAL TREATMENT PROCESS CONTROL: CONCEPTS OF BIOLOGICAL TREATMENT - STUDENT MANUAL.

PERSONAL AUTHOR: CARNEGIE, JOHN W.

DESCRIPTOR: *BIOLOGY; *BIOLOGICAL TREATMENT; *ECOLOGY; *INSTRUCTIONAL MATERIALS; LABORATORY PROCEDURES; *MICROBIOLOGY; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *SLUDGE; *TRAINING; WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 40P. PRICE: $3.40 FROM EQ/IRC. CONTACT LINN-BENTON FOR THEIR PRICE.

ABSTRACT: THIS MANUAL CONTAINS THE TEXTUAL MATERIAL FOR A THREE-LESSON UNIT WHICH INTRODUCES STUDENTS TO THE BASIC CONCEPTS APPLICABLE TO ALL BIOLOGICAL TREATMENT SYSTEMS. THE GENERAL TOPIC AREAS ADDRESSED IN THE LESSONS ARE: (1) THE MICROORGANISMS FOUND IN BIOLOGICAL SYSTEMS; (2) THE FACTORS THAT AFFECT THE GROWTH AND HEALTH OF BIOLOGICAL SYSTEMS; AND (3) THE INTERRELATIONSHIPS BETWEEN GROUPS OF MICROORGANISMSM, THEIR COMPETITION, PREDOMINANCE, AMD SYMBIOSIS. A LIST OF OBJECTIVES, GLOSSARY OF KEY TERMS, LIST OF REFERENCES, AND STUDENT WORKSHEETS (ONE FOR EACH LESSON) ARE INCLUDED.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212 OR LINN-BENTON COMMUNITY COLLEGE, ALBANY, OR

IRIS ACCESSION NUMBER: EW012080

PUBLICATION DATE: 84

TITLE: BIOLOGICAL TREATMENT PROCESS CONTROL: CONCEPTS OF

BIOLOGICAL TREATMENT - INSTRUCTOR'S GUIDE.

PERSONAL AUTHOR: CARNEGIE, JOHN W.

DESCRIPTOR: *BIOLOGY; *BIOLOGICAL TREATMENT; *ECOLOGY; *INSTRUCTIONAL MATERIALS; *INSTRUCTOR'S GUIDES; *LABORATORY PROCEDURES; *MICROBIOLOGY; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *SLUDGE; *TEACHING GUIDES; *TRAINING; WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 31P. PRICE: 32.86 FROM EQ/IRC. CONTACT LINN-BENTON FOR THEIR PRICE.

ABSTRACT: THIS UNIT PROVIDES AN INTRODUCTION TO BASIC CONCEPTS WHICH ARE APPLICABLE TO ALL BIOLOGICAL TREATMENT SYSTEMS. IT CONSISTS OF THREE LESSONS WHICH FOCUS ON: THE MICROORGANISMS FOUND IN BIOLOGICAL SYSTEMS; THE FACTORS THAT AFFECT THE GROWTH AND HEALTH OF BIOLOGICAL SYSTEMS; AND THE INTERRELATIONSHIP BETWEEN GROUPS OF MICROORGANISMS, THEIR COMPETITION, PREDOMINANCE, AND SYMBIOSIS. THE INSTRUCTOR'S GUIDE FOR THE UNIT INCLUDES: (1) AN OVERVIEW OF THE UNIT; (2) LESSON PLANS; (3) LECTURE OUTLINES (KEYED TO A SET OF SLIDES DESIGNED FOR USE WITH THE LESSON); (4) A STUDENT WORKSHEET FOR EACH LESSON (WITH ANSWERS); AND (5) TWO COPIES OF A FINAL QUIZ (WITH AND WITHOUT ANSWERS).

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212 OR LINN-BENTON COMMUNITY COLLEGE, ALBANY, OR

IRIS ACCESSION NUMBER: EW012081

PUBLICATION DATE: 84

TITLE: BIOLOGICAL PROCESS TREATMENT CONTROL: ANAEROBIC DIGESTION - STUDENT MANUAL.

PERSONAL AUTHOR: ARASMITH, E. E. "SKEET"

DESCRIPTOR: *ANAEROBIC DIGESTION; *BIOLOGICAL TREATMENT; *INSTRUCTIONAL MATERIALS; *LABORATORY PROCEDURES; *OPERATIONS (WASTEWATER); POSTSECONDARY EDUCATION; *SLUDGE; *TRAINING; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 90P. PRICE: $6.40 FROM EQ/IRC. CONTACT LINN-BENTON FOR THEIR PRICE.

ABSTRACT: THIS STUDENT MANUAL CONTAINS THE TEXTUAL MATERIAL FOR A FOUR-LESSON UNIT ON ANAEROBIC DIGESTION CONTROL. AREAS ADDRESSED INCLUDE: (1) ANAEROBIC SLUDGE DIGESTION (CONSIDERING THE NATURE OF RAW SLUDGE, PURPOSES OF ANAEROBIC DIGESTION, THE RESULTS OF DIGESTION, TYPES OF EQUIPMENT, AND OTHER TOPICS); (2) DIGESTER PROCESS CONTROL (CONSIDERING FEEDING AND LOADING, CONTROL OF SUPERNATE QUALITY AND EFFECTS, USE OF LABORATORY TESTS AND OTHER INFORMATION FOR PROCESS CONTROL, CHEMICALS USED IN DIGESTER CONTROL, AND OTHER TOPICS); AND (3) TROUBLESHOOTING ASSISTANCE (FOR LOADING, SUPERNATE, DIGESTED SLUDGE, SLUDGE PUMPING AND PIPELINES, SLUDGE TEMPERATURE CONTROL USING INTERNAL COILS, SLUDGE TEMPERATURE CONTROL USING EXTERNAL HEAT EXCHANGERS, SLUDGE MIXING--GAS MIXERS, SLUDGE MIXING--MECHANICAL MIXERS, SCUM BLANKET, DIGESTER GAS SYSTEM, DIGESTER COVERS--FIXED, DIGESTER COVERS--FLOATING, DIGESTER COVERS--GAS HOLDER TYPE, AND TOXICITY). A LIST OF OBJECTIVES, GLOSSARY OF KEY TERMS, LIST OF REFERENCES, AND WORKSHEETS ARE INCLUDED.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212 OR LINN-BENTON COMMUNITY COLLEGE, ALBANY, OR

IRIS ACCESSION NUMBER: EW012082

PUBLICATION DATE: 84

TITLE: BIOLOGICAL PROCESS TREATMENT CONTROL: ANAEROBIC DIGESTION - INSTRUCTOR'S GUIDE.

PERSONAL AUTHOR: ARASMITH, E. E. "SKEET"

DESCRIPTOR: *ANAEROBIC DIGESTION; *BIOLOGICAL TREATMENT; *INSTRUCTIONAL MATERIALS; *INSTRUCTOR'S GUIDES; LABORATORY PROCEDURES; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *SLUDGE; *TEACHING GUIDES; *TRAINING; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 60P. PRICE: $4.60 FROM EQ/IRC. CONTACT LINN-BENTON FOR THEIR PRICE.

ABSTRACT: THIS INSTRUCTOR'S GUIDE CONTAINS MATERIALS NEEDED TO TEACH A FOUR-LESSON UNIT ON ANAEROBIC DIGESTION CONTROL. THESE MATERIALS INCLUDE: (1) UNIT OVERVIEW; (2) LESSON PLANS; (3) LECTURE OUTLINES; (4) STUDENT WORKSHEETS FOR EACH LESSON (WITH ANSWERS); AND (5) TWO COPIES OF A FINAL QUIZ (WITH AND WITHOUT ANSWERS). LESSON 1 IS A REVIEW OF THE THEORY OF ANAEROBIC DIGESTION. TOPICS COVERED INCLUDE THE NATURE OF RAW SLUDGE, PURPOSES OF ANAEROBIC DIGESTION, THE BIOLOGICAL PROCESS, AND THE RESULTS OF DIGESTION. LESSON 2 COVERS CLASSIFICATION OF DIGESTERS AND SYSTEM COMPONENTS. CLASSIFICATION ON THE BASIS OF FUNCTION AND STRUCTURE IS DISCUSSED. THE COMPONENTS OF THE MIXING, HEATING, AND GAS SYSTEM ARE ALSO COVERED. LESSON 3 DEALS WITH PROCESS CONTROL. THE FACTORS WHICH AFFECT OPERATION, CONTROL PARAMETERS, AND SAMPLING AND TESTING ARE ADDRESSED. LESSON 4 IS ON MATHEMATICS CALCULATIONS RELATING TO PROCESS CONTROL. LESSON 1, 2, AND 3 ARE SUPPORTED BY A SET OF 35MM SLIDES (WHICH ARE INDICATED IN THE LECTURE OUTLINES FOR THESE LESSONS).

AVAILABILITY: ENVIRONMENTAL QYALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212 OR LINN-BENTON COMMUNITY COLLEGE, ALBANY, OR

IRIS ACCESSION NUMBER: EW012083

PUBLICATION DATE: 84

TITLE: BIOLOGICAL TREATMENT PROCESS CONTROL: ACTIVATED SLUDGE - INSTRUCTOR'S GUIDE.

PERSONAL AUTHOR: BOE, OWEN K.; KLOPPING, PAUL H.

DESCRIPTOR: *ACTIVATED SLUDGE; *BIOLOGICAL TREATMENT;

*INSTRUCTIONAL MATERIALS; *INSTRUCTOR'S GUIDES; LABORATORY PROCEDURES; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *SLUDGE; *TEACHING GUIDES; *TRAINING; UNIT PROCESSES; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 53P. PRICE: $4.18 FROM EQ/IRC. CONTACT LINN-BENTON FOR THEIR PRICE.

ABSTRACT: THIS INSTRUCTOR'S GUIDE CONTAINS THE MATERIALS NEEDED TO TEACH A SEVEN-LESSON UNIT ON ACTIVATED SLUDGE. THESE MATERIALS INCLUDE AN OVERVIEW OF THE UNIT, LESSON PLANS, LECTURE OUTLINES (KEYED TO SLIDES DESIGNED FOR USE WITH THE LESSONS), STUDENT WORKSHEETS FOR EACH OF THE SEVEN LESSONS (WITH ANSWERS), AND TWO COPIES OF A FINAL QUIZ (WITH AND WITHOUT ANSWERS). TOPIC AREAS ADDRESSED IN THE LESSONS INCLUDE: (1) REVIEW OF ACTIVATED SLUDGE CONCEPTS AND COMPONENTS (INCLUDING AERATION TANKS, AERATION SYSTEMS, CLARIFIERS, AND SLUDGE PUMPING SYSTEMS); (2) ACTIVATED SLUDGE VARIATIONS AND MODES; (3) BIOLOGICAL NATURE OF ACTIVATED SLUDGE; (4) SLUDGE QUALITY AND RESPIROMETRY FOR PROCESS CONTROL; (5) RETURN SLUDGE CONTROL; (6) WASTE SLUDGE CONTROL; AND (7) TREND CHARTS, TESTING, AND DATA MANAGEMENT.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212 OR LINN-BENTON COMMUNITY COLLEGE, ALBANY, OR

IRIS ACCESSION NUMBER: EW012084

PUBLICATION DATE: 84

TITLE: BIOLOGICAL TREATMENT PROCESS CONTROL: ACTIVATED SLUDGE - STUDENT MANUAL.

PERSONAL AUTHOR: BOE, OWEN K.; KLOPPING, PAUL H.

DESCRIPTOR: *ACTIVATED SLUDGE; *BIOLOGICAL TREATMENT; *INSTRUCTIONAL MATERIALS; LABORATORY PROCEDURES; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *SLUDGE; *TRAINING; *UNIT PROCESSES; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 167P. PRICE: $11.02 FROM EQ/IRC. CONTACT LINN-BENTON FOR THEIR PRICE.

ABSTRACT: THIS STUDENT MANUAL CONTAINS THE TEXTUAL MATERIAL FOR A SEVEN-LESSON UNIT ON ACTIVATED SLUDGE. TOPICS AREAS ADDRESSED IN THE LESSONS INCLUDE: (1) ACTIVATED SLUDGE CONCEPTS AND COMPONENTS (INCLUDING AERATION TANKS, AERATION SYSTEMS, CLARIFIERS, AND SLUDGE PUMPING SYSTEMS); (2) ACTIVATED SLUDGE VARIATIONS AND MODES; (3) BIOLOGICAL NATURE OF ACTIVATED SLUDGE; (4) SLUDGE QUALITY AND RESPIROMETRY FOR PROCESS CONTROL; (5) RETURN SLUDGE CONTROL; (6) WASTE SLUDGE CONTROL; AND (7) TREND CHARTS, TESTING, AND DATA MANAGEMENT. A LIST OF OBJECTIVES FOR EACH LESSON, A GLOSSARY OF KEY TERMS, A LIST OF REFERENCES, AND A WORKSHEET FOR EACH LESSON ARE INCLUDED.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212 OR LINN-BENTON COMMUNITY COLLEGE, ALBANY, OR

IRIS ACCESSION NUMBER: EW012085

PUBLICATION DATE: 84

TITLE: BIOLOGICAL TREATMENT PROCESS CONTROL: ACTIVATED BIO-FILTERS - STUDENT MANUAL.

PERSONAL AUTHOR: WOOLEY, JOHN F.

DESCRIPTOR: *ACTIVATED BIOLOGICAL FILTERS; *BIOLOGICAL FILTERS; *BIOLOGICAL TREATMENT; *FILTERS; *INSTRUCTIONAL MATERIALS; *LABORATORY PROCEDURES; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *SLUDGE; *TRAINING; *UNIT PROCESSES; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 31P. PRICE: $2.86 FROM EQ/IRC. CONTACT LINN-BENTON FOR THEIR PRICE.

ABSTRACT: THIS STUDENT MANUAL CONTAINS TEXTUAL MATERIAL FOR A TWO-LESSON UNIT ON ACTIVATED BIO-FILTERS (ABF). THE FIRST LESSON (THE SEWAGE TREATMENT PLANT) EXAMINES THOSE PROCESS UNITS THAT ARE UNIQUE TO THE ABF SYSTEM. THE LESSON INCLUDES A REVIEW OF THE STRUCTURAL COMPONENTS OF THE ABF SYSTEM AND THEIR FUNCTIONS AND A DISCUSSION OF SEVERAL OPERATIONAL MODES AND THE CONDITIONS UNDER WHICH THEY MIGHT BE USED. THE SECOND LESSON COVERS THE OPERATION OF ABF SYSTEMS. THE LABORATORY TESTS RECOMMENDED FOR INFLUENT AND EFFLUENT MONITORING ARE PRESENTED AND RELATED TO THE FACTORS AFFECTING BIOMASS GROWTH. CALCULATIONS REGARDING FOOD-TO-MICROORGANISM (F/M) RATIO AND MEAN CELL RESIDENCE TIME (MCRT) ARE PRESENTED AND PRACTICED. PLANT OBSERVATIONS AND MONITORING ARE DISCUSSED WITH AN EMPHASIS ON AWARENESS AND IDENTIFICATION OF EXISTING AND POTENTIAL PROBLEMS. SOME OPERATIONAL PROBLEMS ARE ALSO PRESENTED WITH RECOMMENDED CORRECTIVE MEASURES. THE MANUAL INCLUDES A LIST OF OBJECTIVES, A GLOSSARY OF KEY TERMS, A LIST OF REFERENCES, AND WORKSHEETS FOR EACH LESSON.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212 OR LINN-BENTON COMMUNITY COLLEGE, ALBANY, OR

IRIS ACCESSION NUMBER: EW012086

PUBLICATION DATE: 84

TITLE: BIOLOGICAL TREATMENT PROCESS CONTROL: ACTIVATED BIO-FILTERS - INSTRUCTOR'S GUIDE.

PERSONAL AUTHOR: WOOLEY, JOHN F.

DESCRIPTOR: *ACTIVATED BIOLOGICAL FILTERS; *BIOLOGICAL FILTERS; *BIOLOGICAL TREATMENT; *FILTERS; *INSTRUCTOR'S GUIDES; *INSTRUCTIONAL MATERIALS; *LABORATORY PROCEDURES; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *SLUDGE; *TEACHING GUIDES; *TRAINING; *UNIT PROCESSES; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 24P. PRICE: $2.44 FROM EQ/IRC. CONTACT LINN-BENTON FOR THEIR PRICE.

ABSTRACT: THIS INSTRUCTOR'S MANUAL CONTAINS MATERIALS

NEEDED TO TEACH A TWO-LESSON UNIT ON ACTIVATED BIO-FILTERS (ABF). THESE MATERIALS INCLUDE: (1) AN OVERVIEW OF THE TWO LESSONS; (2) LESSON PLANS; (3) LECTURE OUTLINES (KEYED TO A SET OF SLIDES DESIGNED FOR USE WITH THE LESSONS); (4) OVERHEAD TRANSPARENCY MASTERS; (5) WORKSHEETS FOR EACH LESSON (WITH ANSWERS); AND (6) TWO COPIES OF A FINAL QUIZ (WITH AND WITHOUT ANSWERS). THE FIRST LESSON (THE SEWAGE TREATMENT PLANT) EXAMINES THOSE PROCESS UNITS THAT ARE UNIQUE TO THE ABF SYSTEM. THE LESSON INCLUDES A REVIEW OF THE STRUCTURAL COMPONENTS OF THE ABF SYSTEM AND THEIR FUNCTIONS AND A DISCUSSION OF SEVERAL OPERATIONAL MODES AND THE CONDITIONS UNDER WHICH THEY MIGHT BE USED. THE SECOND LESSON COVERS OPERATION OF ABF SYSTEMS. THE LABORATORY TESTS RECOMMENDED FOR INFLUENT AND EFFLUENT MONITORING ARE PRESENTED AND RELATED TO THE FACTORS AFFECTING BIOMASS GROWTH. CALCULATIONS REGARDING FOOD-TO-MICROORGANISMS (F/M) RATIO AND MEAN CELL RESIDENCE TIME (MCRT) ARE PRESENTED AND PRACTICED. PLANT OBSERVATIONS AND MONITORING ARE DISCUSSED WITH AN EMPHASIS ON AWARENESS AND IDENTIFICATION OF EXISTING AND POTENTIAL PROBLEMS. SOME OPERATIONAL PROLLEMS ARE ALSO PRESENTED WITH RECOMMENDED CORRECTIVE MEASURES.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212 OR LINN-BENTON COMMUNITY COLLEGE, ALBANY, OR

IRIS ACCESSION NUMBER: EW012087

PUBLICATION DATE: 84

TITLE: BIOLOGICAL TREATMENT PROCESS CONTROL: ROTATING BIOLOGICAL CONTACTORS (RBC'S) - INSTRUCTOR'S GUIDE.

PERSONAL AUTHOR: ZICKEFOOSE, CHARLES S.

DESCRIPTOR: *BIOLOGICAL CONTACTORS; *BIOLOGICAL TREATMENT; *INSTRUCTIONAL MATERIALS; *INSTRUCTOR'S GUIDES; *MAINTENANCE; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *ROTATING BIOLOGICAL CONTACTORS; *TEACHING GUIDES; *TRAINING; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 42P. PRICE: $3.52 FROM EQ/IRC. CONTACT LINN-BENTON FOR THEIR PRICE.

ABSTRACT: THIS TWO-LESSON UNIT ON ROTATING BIOLOGICAL CONTRACTORS (RBC'S) IS DESIGNED TO BE USED WITH STUDENTS WHO HAVE HAD SOME EXPERIENCE IN WASTEWATER TREATMENT AND A BASIC UNDERSTANDING OF BIOLOGICAL TREATMENT. THE FIRST LESSON PROVIDES INFORMATION ON THE CONCEPTS AND COMPONENTS OF RBC TREATMENT SYSTEMS. THE SECOND LESSON FOCUSES OF DESIGN OPERATION AND MAINTENANCE. THE TEACHING GUIDE INCLUDES: (1) AN OVERVIEW OF THE UNIT; (2) LESSON PLANS; (3) LECTURE OUTLINES; (4) OVERHEAD TRANSPARENCY MASTERS FOR USE WITH THE SECOND LESSON; (5) STUDENT WORKSHEETS (WITH ANSWERS); AND (3) TWO COPIES OF A FINAL QUIZ (WITH AND WITHOUT ANSWERS). THE LECTURE OUTLINE FOR THE FIRST LESSON INCLUDES REFERENCE TO A SET OF SLIDES DEVELOPED FOR USE WITH THE LESSON. HOWEVER, INSTRUCTORS ARE ENCOURAGED TO ADD THEIR OWN SLIDES OR TO CHANGE THE ORDER OF SLIDES TO FIT THEIR OWN TEACHING STYLES.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE

CENTER. 1200 CHAMBERS RD. ROOM 310. COLUMBUS. OH 43212 OR LINN-BENTON COMMUNITY COLLEGE. ALBANY. OR

IRIS ACCESSION NUMBER: EW012088

PUBLICATION DATE: 84

TITLE: BIOLOGICAL TREATMENT PROCESS CONTROL: ROTATING BIOLOGICAL CONTACTORS (RBCS) - STUDENT MANUAL.

PERSONAL AUTHOR: ZICKEFOOSE. CHARLES S.

DESCRIPTOR: *BIOLOGICAL CONTACTORS; *BIOLOGICAL TREATMENT; *INSTRUCTIONAL MATERIALS; *MAINTENANCE; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *ROTATING BIOLOGICAL CONTACTORS; *TRAINING; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 43P. PRICE: $3.88 FROM EQ/IRC. CONTACT LINN-BENTON FOR THEIR PRICE.

ABSTRACT: THIS STUDENT MANUAL PROVIDES THE TEXTUAL MATERIAL FOR A UNIT ON ROTATING BIOLOGICAL CONTRACTORS (RBC'S). TOPIC AREAS CONSIDERED INCLUDE: (1) FLOW PATTERNS OF WATER THROUGH RBC INSTALLATIONS; (2) BASIC CONCEPTS (SHAFT AND STAGE); (3) CHARACTERISTICS OF BIOMASS; (4) MECHANICAL FEATURES (BEARINGS, MECHANICAL DRIVE SYSTEMS, AND AIR DRIVE SYSTEMS); (5) DESIGN CONSIDERATIONS (FLOW RATES, ORGANIC AND SOLID LOADS, INDUSTRIAL LOADING, AND WEATHER/ENVIRONMENTAL INFLUENCES); (6) INTERACTION OF UNIT PROCESSES (PRELIMINARY TREATMENT, PRIMARY CLARIFIER, RETURN STREAMS, AND SECONDARY CLARIFIER); (7) PROCESS MONITORING AND TESTING, FOCUSING ON THE VISUAL OBSERVATION OF THE BIOMASS; (8) PROCESS CONTROL FOR STEADY STATE OPERATION, (CONSIDERING MECHANICAL AND AIR DRIVE SYSTEMS); (9) MAKING PROCESS CONTROL CHANGES. A LIST OF OBJECTIVES, A GLOSSARY OF KEY TERMS, A LIST OF REFERENCES, AND STUDENT WORKSHEETS ARE INCLUDED. IT IS ASSUMED THAT STUDENTS USING THIS MANUAL HAVE HAD SOME EXPERIENCE IN WASTEWATER TREATMENT AND A BASIC UNDERSTANDING OF BIOLOGICAL TREATMENT.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER. 1200 CHAMBERS RD. ROOM 319. COLUMBUS. OH 43212 OR LINN-BENTON COMMUNITY COLLEGE. ALBANY. OR.

IRIS ACCESSION NUMBER: EW012089

PUBLICATION DATE: 84

TITLE: BIOLOGICAL PROCESS TREATMENT CONTROL: AEROBIC DIGESTION - STUDENT MANUAL.

PERSONAL AUTHOR: KLOPPING. PAUL H.

DESCRIPTOR: *AEROBIC DIGESTION; *BIOLOGICAL TREATMENT; *INSTRUCTIONAL MATERIALS; *MICROBIOLOGY; *LABORATORY PROCEDURES; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *SLUDGE; *TRAINING; *UNIT PROCESSES; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 17P. PRICE: $2.50 FROM EQ/IRC. CONTACT LINN-BENTON FOR THEIR PRICE.

ABSTRACT: THIS UNIT ON AEROBIC SLUDGE DIGESTION COVERS THE THEORY OF THE PROCESS, SYSTEM COMPONENTS, FACTORS THAT AFFECT THE PROCESS PERFORMANCE, STANDARD OPERATIONAL CONCERNS, INDICATORS OF STEADY-STATE OPERATIONS AND OPERATIONAL PROBLEMS. THE STUDENT MANUAL CONTAINS: (1) OBJECTIVES; (2) GLOSSARY; (3) TEXT; (4) REFERENCES; AND (5) WORKSHEET.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212 OR LINN-BENTON COMMUNITY COLLEGE, ALBANY, OR

IRIS ACCESSION NUMBER: EW012090

PUBLICATION DATE: 84

TITLE: BIOLOGICAL PROCESS TREATMENT CONTROL: AEROBIC DIGESTION - INSTRUCTOR'S GUIDE.

PERSONAL AUTHOR: KLOPPING, PAUL H.

DESCRIPTOR: *AEROBIC DIGESTION; *BIOLOGICAL TREATMENT; *INSTRUCTIONAL MATERIALS; *INSTRUCTOR'S GUIDES; *LABORATORY PROCEDURES; *MICROBIOLOGY; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *SLUDGE; *TEACHING GUIDES; *TRAINING; *UNIT PROCESSES; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 25P. PRICE: $2.50 FROM EQ/IRC. CONTACT LINN-BENTON FOR THEIR PRICE.

ABSTRACT: THIS UNIT ON AEROBIC SLUDGE DIGESTION COVERS THE THEORY OF THE PROCESS, SYSTEM COMPONENTS, FACTORS THAT AFFECT THE PROCESS PERFORMANCE, STANDARD OPERATIONAL CONCERNS, INDICATORS OF STEADY-STATE OPERATIONS, AND OPERATIONAL PROBLEMS. THE INSTRUCTOR'S GUIDE INCLUDES: (1) AN OVERVIEW OF THE UNIT; (2) LESSON PLAN; (3) LECTURE OUTLINE (KEYED TO A SET OF SLIDES DESIGNED FOR USE WITH THE UNIT); (4) NARRATIVE FOR THE SLIDE PROGRAM; (5) OVERHEAD TRANSPARENCY MASTERS; (6) STUDENT WORKSHEET (WITH ANSWERS); AND (7) TWO COPIES OF A FINAL QUIZ (WITH AND WITHOUT ANSWERS).

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212 OR LINN-BENTON COMMUNITY COLLEGE, ALBANY, OR

IRIS ACCESSION NUMBER: EW012091

PUBLICATION DATE: 84

TITLE: BIOLOGICAL TREATMENT PROCESS CONTROL: OXIDATION DITCHES - STUDENT MANUAL.

PERSONAL AUTHOR: NELSEN, DAVID

DESCRIPTOR: *BIOLOGICAL TREATMENT; *INSTRUCTIONAL

MATERIALS; *LABORATORY PROCEDURES; *MICROBIOLOGY; *OPERATIONS (WASTEWATER); *OXIDATION DITCHES; *POSTSECONDARY EDUCATION; *SLUDGE; *TRAINING; *UNIT PROCESSES; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 60P. PRICE: $4.60 FROM EQ/IRC. CONTACT LINN-BENTON FOR THEIR PRICE.

ABSTRACT: THE TEXTUAL MATERIAL FOR A TWO-LESSON UNIT ON OXIDATION DITCHES IS PRESENTED IN THIS STUDENT MANUAL. TOPICS DISCUSSED IN THE FIRST LESSON (INTRODUCTION, THEORY, AND COMPONENTS) INCLUDE: HISTORY OF THE OXIDATION DITCH PROCESS; VARIOUS DESIGNS OF THE OXIDATION DITCH; MULTI-TRENCH SYSTEMS; CARROUSEL SYSTEM; ADVANTAGES AND DISADVANTAGES OF THE OXIDATION DITCH; AERATION OF THE OXIDATION DITCH; TYPES OF AERATION USED; SAFETY COVERS FOR AERATOR UNITS; CLARIFICATION; PHILOSOPHY OF CLARIFICATION; CHARACTERISTICS OF SLUDGE SETTLING; MECHANICAL ASPECTS OF CLARIFICATION; ROLE OF SLUDGE SETTLING IN CLARIFICATION; SOLIDS INVENTORY CONTROLS; IMPORTANCE OF SEGMENTED WASTING SCHEDULES; AND PROCESS HINTS FOR THE OXIDATION DITCH PLANT. TOPICS DISCUSSED IN THE SECOND LESSON (PROCESS KINETICS AND PROCESS CONTROL) INCLUDE: CARBON IN THE ENVIRONMENT; CARBONACEOUS OXIDATION; PROCESS CONTROL OF CARBONACEOUS OXIDATION; NITROGEN AND SEWAGE TREATMENT; IMPORTANCE AND SOURCES OF NITROGEN IN THE ENVIRONMENT; CONCERNS WITH NITROGEN; NITRIFICATION/DENITRIFICATION; PROCESS CONTROL OF CARBONACEOUS AND NITROGEN OXIDATION; DENITRIFICATION KINETICS; AND HELPFUL HINTS IN THE OPERATIONAL CONTROL OF AN OXIDATION DITCH. A LIST OF 21 UNIT OBJECTIVES, A GLOSSARY OF KEY TERMS, A SHORT LIST OF REFERENCES, AND STUDENT WORKSHEET ARE INCLUDED.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212 OR LINN-BENTON COMMUNITY COLLEGE, ALBANY, OR

IRIS ACCESSION NUMBER: EW012092

PUBLICATION DATE: 84

TITLE: BIOLOGICAL TREATMENT PROCESS CONTROL: OXIDATION DITCHES - INSTRUCTOR'S GUIDE.

PERSONAL AUTHOR: NELSEN, DAVID

DESCRIPTOR: BIOLOGICAL TREATMENT; INSTRUCTIONAL MATERIALS; INSTRUCTOR'S GUIDES; LABORATORY PROCEDURES; MICROBIOLOGY; *OPERATIONS (WASTEWATER); *OXIDATION DITCHES; *POSTSECONDARY EDUCATION; *SLUDGE; *TEACHING GUIDES; *TRAINING; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 18P. PRICE: $2.08 FROM EQ/IRC. CONTACT LINN-BENTON FOR THEIR PRICE.

ABSTRACT: THIS INSTRUCTOR'S GUIDE CONTAINS MATERIALS NEEDED FOR TEACHING A TWO-LESSON UNIT ON OXIDATION DITCHES. THESE MATERIALS INCLUDE: (1) AN OVERVIEW OF THE TWO LESSONS; (2) LESSON PLANS; (3) LECTURE OUTLINES; (4) STUDENT WORKSHEET (WITH ANSWERS); AND (5) TWO COPIES OF A FINAL QUIZ (WITH AND WITHOUT ANSWERS). THE FIRST LESSON: REVIEWS THE THEORY, STRUCTURE, AND COMPONENTS OF THE OXIDATION DITCH SYSTEM;

DISCUSSES NITROFICATION/DENITRIFICATION AND ITS IMPORTANCE TO OXIDATION DITCH OPERATION; AND OUTLINES AND EXPLAINS PROCESS MONITORING AND PROCESS CONTROL TECHNIQUES. (THIS LESSON IS DESIGNED TO BE PRESENTED WITH THE AID OF A SET OF 35MM SLIDES ACCOMPANYING THE UNIT.) THE SECOND LESSON, WHICH IS MORE ADVANCED, COVERS THE TOPICS OF CARBONACEOUS AND NITROGENOUS OXIDATION AND THEIR IMPORTANCE ON OXIDATION DITCH PROCESS CONTROL. SINCE THIS LESSON COULD BE CONSIDERED OPTIONAL FOR INSTRUCTION AT THE INTERMEDIATE LEVEL, THE STUDENT WORKSHEET AND FINAL QUIZ COVER ONLY THE MATERIAL PRESENTED IN THE FIRST LESSON.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212 OR LINN-BENTON COMMUNITY COLLEGE, ALBANY, OR

IRIS ACCESSION NUMBER: EW012093

PUBLICATION DATE: 85

TITLE: 1984 NEEDS SURVEY REPORT TO CONGRESS. ASSESSMENT OF NEEDED PUBLICLY OWNED WASTEWATER TREATMENT FACILITIES IN THE UNITED STATES.

DESCRIPTOR: *CURRENT NEEDS; CLEAN WATER ACT; *COSTS; *FACILITIES; *FUNDING; *FINANCING; *FUTURE NEEDS; *FEDERAL ROLE; *OPERATIONS (WASTEWATER); *PLANNING; *STATE ROLE; *SURVEYS; *WASTEWATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 127P. PRICE: $5.00

ABSTRACT: THIS PUBLICATION ASSESSES THE CAPITAL INVESTMENT REQUIRED TO MEET THE NEEDS OF 1984 AND YEAR 2000 POPULATIONS. IT ALSO INCLUDES A PROJECTION OF THE POTENTIAL LEVEL OF FEDERAL INVESTMENT IN THESE FACILITIES IF ALL NEEDS WERE FULLY FUNDED IN PROVISIONS OF THE CLEAN WATER ACT. POTENTIAL CHANGES IN THE WATER QUALITY OF STREAMS AND RIVERS ARE ALSO PROJECTED.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012094

PUBLICATION DATE: 85

TITLE: REPORT TO CONGRESS ON TRAINING FOR OPERATORS OF PUBLICLY OWNED WASTEWATER TREATMENT PLANTS.

DESCRIPTOR: *CURRENT NEEDS; *FACILITIES; *FEDERAL ROLE; *FUTURE NEEDS; *LOCAL ROLE; *OPERATIONS (WASTEWATER); *OPERATOR TRAINING; *PERFORMANCE EVALUATION; *RECOMMENDATIONS; *REPORTS; *STATE ROLE; *USEPA; *TRAINING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 70P. PRICE: $3.50

ABSTRACT: THIS IS THE REPORT OF THE USEPA TO THE UNITED STATES CONGRESS ON THE DEVELOPMENT OF WASTEWATER TREATMENT PLANT OPERATOR TRAINING PROGRAMS FOR THE IMPROVEMENT OF

COMPLIANCE BY PUBLICLY OWNED FACILITIES. INCLUDED IN THE PUBLICATION ARE (1) INTRODUCTION, (2) HISTORY AND STATUS OF FEDERAL OPERATOR TRAINING PROGRAMS, (3) STATE ONSITE TRAINING AND TECHNICAL ASSISTANCE PROGRAM ACCOMPLISHMENTS, (4) STATUS OF STATE OPERATOR TRAINING PROGRAMS, (5) CONCLUSIONS, AND (6) ATTACHMENTS.

AVAILABILITY: ENVIRONMENTAL QUALITY INFORMATION REFERENCE CENTER, 1200 CHAMBERS RD. ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012095

PUBLICATION DATE: MAY 84

TITLE: REMOVAL OF TRIHALOMETHANE PRECURSORS BY DIRECT FILTRATION AND CONVENTIONAL TREATMENT. PROJECT SUMMARY.

PERSONAL AUTHOR: EDZWALD, JAMES K.

DESCRIPTOR: *CONVENTIONAL TREATMENT; *DRINKING WATER; *FILTRATION; *OPERATIONS (WATER); *RESEARCH REPORTS; *THM; *TRIHALOMETHANE; *WATER TREATMENT

DESCRIPTIVE NOTE: PRICE: $29.50. ORDER NO.: COMPLETE DOCUMENT PB84-163278

ABSTRACT: REMOVAL OF TRIHALOMETHANE (THM) PRECURSORS FROM DRINKING WATER WAS STUDIED IN DIRECT FILTRATION AND CONVENTIONAL TREATMENT PLANTS. RESULTS OF THE RESEARCH ARE REPORTED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012096

PUBLICATION DATE: 84

TITLE: DEVELOPMENT AND EVALUATION OF METHODS FOR TOTAL ORGANIC HALIDE AND PURGEABLE ORGANIC HALIDE IN WASTEWATER. PROJECT SUMMARY.

PERSONAL AUTHOR: RIGGIN, R. M.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *HALIDES; *LABORATORY PROCEDURES; *ORGANIC HALIDES; *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *WASTEWATER

DESCRIPTIVE NOTE: PRICE: $14.50. ORDER NO.: PB84-134337

ABSTRACT: TWO APPROACHES FOR DETERMINING TOTAL PURGEABLE AND NONPURGEABLE ORGANIC HALIDES IN WASTEWATER WERE SELECTED FOR LABORATORY EVALUATION. RESULTS OF THE STUDIES ARE REPORTED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012097

PUBLICATION DATE: 84

TITLE: EVALUATION OF VOC EMISSIONS FROM WASTEWATER SYSTEMS (SECONDARY EMISSIONS). PROJECT SUMMARY.

PERSONAL AUTHOR: COX, R. D.; AND OTHERS

DESCRIPTOR: *AIR POLLUTION CONTROL; *EMISSIONS; *FIELD STUDIES; *OPERATIONS (WASTEWATER); *PREDICTION; *SECONDARY EMISSIONS; *VOC EMISSIONS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: PRICE: $16.00. ORDER NO.: PB84-173 780

ABSTRACT: THIS STUDY WAS PERFORMED TO DEVELOP AND EVALUATE PROCEDURES FOR MEASURING OR ESTIMATING VOC EMISSIONS FROM WASTEWATER TREATMENT FACILITIES. THE RESULTS OF THIS STUDY PROVIDE INFORMATION ON THE ERRORS TO BE EXPECTED WHEN USING VOC EMISSIONS FROM WASTEWATER TREATMENT FACILITIES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012098

PUBLICATION DATE: 84

TITLE: EFFECTS OF SEWAGE SLUDGE ON CORN SILAGE AND ANIMAL PRODUCTS. PROJECT SUMMARY.

PERSONAL AUTHOR: DOWDY, R. H.; AND OTHERS

DESCRIPTOR: *AGRICULTURE; *ANIMAL PRODUCTS; *CORN; *FERTILIZER; *HEAVY METALS; *RESEARCH REPORTS; *SLUDGE; *SEWAGE SLUDGE; *SILAGE; *WASTE DISPOSAL

DESCRIPTIVE NOTE: PRICE: $10.00. ORDER NO.: PB84-168 756

ABSTRACT: REPORTED ARE THE RESULTS OF STUDIES CONDUCTED TO DOCUMENT THE IMPACT OF SLUDGE-FERTILIZED CORN ON THE FOOD CHAIN UNDER CONTROLLED EXPERIMENTAL CONDITIONS THAT ELIMINATED ANY DIRECT INGESTION OF SEWAGE SLUDGE.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012099

PUBLICATION DATE: 84

TITLE: MULTIELEMENTAL ANALYTICAL TECHNIQUES FOR HAZARDOUS WASTE ANALYSIS: THE STATE-OF-THE ART. PROJECT SUMMARY

PERSONAL AUTHOR: HINNERS, T. A.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *HAZARDOUS WASTES; *HEAVY METALS; *LABORATORY PROCEDURES; *METALS; *LITERATURE

REVIEWS

DESCRIPTIVE NOTE: PRICE: $13.00. ORDER NO.: PB84-178 425

ABSTRACT: THIS LITERATURE REVIEW CONSIDERED MULTIELEMENTAL ANALYTICAL TECHNIQUES FOR THE DETERMINATION OF ANTIMONY, ARSENIC, BARIUM, BERYLLIUM, CADMIUM, CHROMIUM, COPPER, LEAD, MERCURY, NICKEL, SELENIUM, SILVER, THALLIUM, AND ZINC IN HAZARDOUS WASTES. EACH TECHNIQUE IS DISCUSSED WITH RESPECT TO THEORY, ANTICIPATED INTERFERENCES AND CORRECTION TECHNIQUES, OBSERVED PRECISION AND ACCURACY FOR SIMPLE AND COMPLEX MATRICES, DETECTION LIMITS, AND COST.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012100

PUBLICATION DATE: 84

TITLE: AIR LAND WATER ANALYSIS SYSTEM (ALWAS): A MULTI-MEDIA MODEL FOR TOXIC SUBSTANCES. PROJECT SUMMARY.

PERSONAL AUTHOR: TUCKER, W. A.; AND OTHERS

DESCRIPTOR: *AIR POLLUTION CONTROL; *ALWAS; *DISPERSION; *ENVIRONMENTAL MODELS; *MODELS; *POLLUTION; *PROJECT DESCRIPTIONS; *TOXIC SUBSTANCES; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: PRICE: $34.00. ORDER NO.: PB84-171 743

ABSTRACT: THIS PROJECT SUMMARY DESCRIBES THE AIR LAND WATER ANALYSIS SYSTEM (ALWAS). IT IS A MULTI-MEDIA ENVIRONMENTAL MODEL FOR DESCRIBING THE ATMOSPHERIC DISPERSION OF TOXICANTS, AND THE SUBSEQUENT FATE OF THESE MATERIALS IN SURFACE WATER BODIES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012101

PUBLICATION DATE: 84

TITLE: CAPTURE-AND-CONTAINMENT SYSTEMS FOR PROJECT SUMMARY.

PERSONAL AUTHOR: MARSHALL, MERVIN D.

DESCRIPTOR: *EQUIPMENT; *GROUNDWATER; *HAZARDOUS MATERIALS; *PERFORMANCE EVALUATION; *SOILS; *SPILL SITES; *RESEARCH REPORTS; *SPILL CLEAN UP; *SPILL PROTECTION

DESCRIPTIVE NOTE: PRICE: $11.50. ORDER NO.: PB84-186 089

ABSTRACT: METHODS WERE INVESTIGATED FOR SEALING THE SURFACE OF SOILS AND THEREBY PREVENTING THE INTRUSION OF SPILLED HAZARDOUS MATERIALS INTO THE UNDERLYING GROUNDWATER. THE

GOAL WAS TO DEVELOP A PORTABLE, SELF-CONTAINED, UNIVERSAL SEALING SYSTEM THAT COULD BE OPERATED BY ONE PERSON, RETAIN THE SPILLED MATERIALS FOR 24HR., AND CREATE NO HAZARDS FOR THE USER OR THE ENVIRONMENT.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012102

PUBLICATION DATE: 84

TITLE: RESTORATION OF FAILING ON-LOT SEWAGE DISPOSAL AREAS. PROJECT SUMMARY.

PERSONAL AUTHOR: FRITTON, DANIEL D.; AND OTHERS

DESCRIPTOR: *ABSORPTION BED RESTING; *MAINTENANCE; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *REHABILITATION; *SEPTIC TANKS; *SOIL ABSORPTION SYSTEMS; *WASTEWATER TREATMENT; *WATER CONSERVATION; *WATER QUALITY

DESCRIPTIVE NOTE: PRICE: $14.50. ORDER NO.: PB84-168 970

ABSTRACT: TWO TECHNIQUES WERE EVALUATED FOR REHABILITATING FAILING SEPTIC TANK-SOIL ABSORPTION SYSTEMS-WATER CONSERVATION AND ABSORPTION BED RESTING. RESULTS ARE REPORTED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012103

PUBLICATION DATE: 84

TITLE: EADS LIQUID EFFLUENTS DATA SYSTEM 1982 ANNUAL REPORT. PROJECT SUMMARY.

PERSONAL AUTHOR: REIDER, J. PATRICK

DESCRIPTOR: *EADS; *EFFLUENTS; *DATABASES; *INDUSTRIAL WASTES; *LEDS; *ENERGY SYSTEMS; *SAMPLING; *USEPA; *WASTEWATER TREATMENT; *WASTEWATER DISCHARGES

DESCRIPTIVE NOTE: PRICE: $8.50. ORDER NO.: PB84-194 091

ABSTRACT: THIS REPORT IS THE FIRST DATA SUMMARY OF WASTEWATER SAMPLING AND ANALYSIS RESULTS COMPILED IN EPA'S LIQUID EFFLUENTS DATA SYSTEM (LEDS). LEDS IS A COMPONENT OF A GROUP OF RELATED COMPUTERIZED DATA BASES-THE ENVIRONMENTAL ASSESSMENT DATA SYSTEMS (EADS)-THAT DESCRIBE MULTIMEDIA DISCHARGES FROM ENERGY SYSTEMS AND INDUSTRIAL PROCESSES. THIS REPORT SUMMARIZES DATA COMPILED FROM THE IMPLEMENTATION OF LEDS IN 1980 THROUGH 1982.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012104

PUBLICATION DATE: 84

TITLE: REMOVAL OF GIARDIA LAMBLIA CYSTS BY DRINKING WATER TREATMENT PLANTS. PROJRCT SUMMARY.

PERSONAL AUTHOR: DEWALLE, FOPPE B.; AND OTHERS

DESCRIPTOR: COAGULATION; *DRINKING WATER; FILTRATION; *GIARDIA LAMBLIA; FLOCCULATION; *PERFORMANCE EVALUATION; *OPERATIONS (WATER); *RESEARCH REPORTS; *WASHINGTON; *WATER TREATMENT

DESCRIPTIVE NOTE: PRICE: $13.00. ORDER NO.: PB84-162874

ABSTRACT: A PILOT STUDY WAS CONDUCTED TO EVALUATE THE REMOVAL OF GIARDIA LAMBLIA CYSTS AND CYST-SIZED PARTICLES FROM CASCADE MOUNTAIN WATERS. RESULTS OF THE STUDY ARE REPORTED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012105

PUBLICATION DATE: 84

TITLE: WASTEWATER RECYCLE AND REUSE POTENTIAL FOR INDIRECT DISCHARGE TEXTILE FINSHING MILLS. PROJECT SUMMARY.

PERSONAL AUTHOR: BERGENTHAL, JON F.

DESCRIPTOR: *COSTS; *ECONOMICS; *ENVIRONMENTAL EFFECTS; *INDUSTRIAL WASTES; *RECYCLING; *TECHNOLOGY; *TEXTILES; *WASTEWATER TREATMENT; *WATER RECYCLING; *WATER USE; *WATER REUSE

DESCRIPTIVE NOTE: PRICE: $19.00 AND 29.50. ORDER NO.: PB84-174 150 AND PB84-174 168

ABSTRACT: THIS REPORT PRESENTS DETAILED INFORMATION ON TEXTILE WASTEWATER RECYCLE/REUSE TECHNOLOGIES. THE INFORMATION IN THIS REPORT IS BASED ON A SURVEY OF THE LITERATURE, DISCUSSIONS WITH TECHNOLOGY VENDORS AND RESEARCHERS, AND ENGINEERING STUDIES CONDUCTED AT SIX TEXTILE FINISHING MILLS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012106

PUBLICATION DATE: 84

TITLE: PERFORMANCE AND ECONOMIC FEASIBILITY OF A SLUDGE/WASTEPAPER GASIFIER SYSTEM. PROJECT SUMMARY.

PERSONAL AUTHOR: SORBO, N. W.; AND OTHERS

DESCRIPTOR: *CO-DISPOSAL; *COSTS; *ECONOMICS; *GASIFICATION PROCESS; *PERFORMANCE EVALUATION; *SEWAGE SLUDGE; *SLUDGE; *SOLID WASTES; *WASTE DISPOSAL; *WASTEPAPER

DESCRIPTIVE NOTE: PRICE: $17.50. ORDER NO.: PB84-169317

ABSTRACT: SUMMARIZED IS A RESEARCH PROJECT DEALING WITH THE APPLICATION OF THE GASIFICATION PROCESS FOR THE CO-DISPOSAL OF SLUDGE AND WASTEPAPER. THE ECONOMIC FEASIBILITY OF THE PROCESS IS HIGHLY SENSITIVE TO THE COST OF WOOD CHIPS, THE SOLIDS CONTENT OF THE DEWATERED SLUDGE, THE PERCENTAGE OF WASTEWATER COLLECTED, AND THE RESALE OF ELECTRICITY.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012110

PUBLICATION DATE: 84

TITLE: NATIONAL MARINE POLLUTION PROGRAM: CATALOG OF FEDERAL PROJECTS FY 1983 UPDATE.

DESCRIPTOR: DEVELOPMENT; *FEDERAL PROJECTS; *MARINE POLLUTION; MONITORING; *POLLUTION; *PROJECT DESCRIPTIONS; *REPORTS; RESEARCH; *WATER QUALITY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 328P. PRICE CODE: PC A15/MF A01. ORDER NO.: PB85-139012/WEP

ABSTRACT: THE CATALOG OF FEDERAL PROJECTS IS ONE OF A SERIES OF DOCUMENTS PUBLISHED BY NATIONAL MARINE POLLUTION PROGRAM OFFICE TO MEET THE MANDATES OF THE NATIONAL OCEAN POLLUTION PLANNING ACT. THE ACT CALLS FOR A DETAILED LISTING OF ALL EXISTING FEDERAL PROGRAMS RELATED TO OCEAN POLLUTION RESEARCH, DEVELOPMENT, AND MONITORING. TWO REPORTS ARE PUBLISHED ON AN ANNUAL BASIS TO MEET THIS REQUIREMENT. ONE OF THESE CONTAINS SUMMARIES OF THE MAJOR PROGRAMS CONDUCTED BY THE FEDERAL AGENCIES, THE SECOND IS A CATALOG OF THE SPECIFIC PROJECTS THAT COMPRISE THESE PROGRAMS. THE FOLLOWING REPORT IS THE FY 1983 UPDATE OF THE LATTER.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012111

PUBLICATION DATE: 82

TITLE: NATIONAL MARINE POLLUTION PROGRAM: CATALOG OF FEDERAL PROJECTS.

DESCRIPTOR: *FEDERAL PROJECTS; *GREAT LAKES; *MARINE POLLUTION; *OCEANS; *POLLUTION; *PROJECT DESCRIPTIONS; *REPORTS; *WATER QUALITY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 430P. PRICE CODE: PC A19/MF A01. ORDER NO.: PB85-139020/WEP.

ABSTRACT: THE CATALOG OF FEDERAL PROJECTS, IS A PRIMARY SUPPORTING DOCUMENT FOR THE NATIONAL MARINE POLLUTION PROGRAM PLAN FY 1981 - FY 1985. THE CATALOG PRESENTS SUMMARIES OF ABOUT 1000 PROJECTS IN NEARLY 100 PROGRAMS FUNDED BY THE ELEVEN FEDERAL DEPARTMENT AND INDEPENDENT AGENCIES INVOLVED IN THE NATIONAL MARINE POLLUTION PROGRAM. PROJECTS INCLUDED IN THE CATALOG ARE LIMITED TO EFFORTS THAT FOCUS PRIMARILY ON POLLUTION PROBLEMS IN THE OCEANS AND GREAT LAKES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012112

PUBLICATION DATE: 85

TITLE: WATER QUALITY MODELING: HYDROLOGICAL SYSTEMS. APRIL 1983-JANUARY 1985 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; ECONOMICS; *HYDROLOGY; *HYDROLOGICAL SYSTEMS; *MODELS; *WATER QUALITY; *WATER RESOURCES

DESCRIPTIVE NOTE: 149P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-853513/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING TECHNIQUES AND USES OF HYDROLOGIC MODELS. MODELS ARE USED FOR HYDROLOGIC TRANSPORT, CATCHMENT, STORAGE, STREAM FLOW, AQUIFER MANAGEMENT, AND WATER QUALITY IN TERMS OF SEDIMENT, SALINITY, AND POLLUTANTS. SOME MODELS ADDRESS THE ECONOMIC FACTORS OF WATERSHEDS AND RIVERS. A FEW OF THE CITATIONS RELATE TO DATA COLLECTION FOR MODEL STUDIES. (THIS UPDATED BIBLIOGRAPHY CONTAINS 144 CITATIONS, 66 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012113

PUBLICATION DATE: 84

TITLE: WASTEWATER TREATMENT. JUNE, 1970-OCTOBER, 1984 (CITATIONS FROM THE ENGINEERING INDEX DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; INDUSTRIAL WASTES; *OPERATIONS (WASTEWATER); *RECYCLING; *TECHNOLOGY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 127P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-830493/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING METHODS AND TECHNOLOGY FOR THE TREATMENT AND PURIFICATION OF INDUSTRIAL EFFLUENTS AND THE RECYCLING OF VARIOUS EFFLUENT COMPONENTS. EFFLUENTS FROM MINING AND RELATED ACTIVITIES ARE EXCLUDED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 181 CITATIONS, 15 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012114

PUBLICATION DATE: 84

TITLE: ROLE OF BIOLOGICAL ASSESSMENT IN EFFLUENT CONTROL.

PERSONAL AUTHOR: MOUNT, D. I.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *BIOLOGICAL ASSESSMENT; COMPLIANCE; *EFFLUENTS; *EFFLUENT CONTROL; PERMIT LIMITS; *TOXICITY; *TOXICITY TESTS; *WATER QUALITY

DESCRIPTIVE NOTE: 19P. PRICE CODE: PC A02/MF A01. ORDER NO.: PB85-116101/WEP

ABSTRACT: THE U.S. ENVIRONMENTAL PROTECTION AGENCY ISSUED A WATER-QUALITY BASED POLICY IN MARCH, 1984 WHICH INCLUDES CONTROL OF TOXICITY IN EFFLUENTS IF RECEIVING WATER IMPACT OCCURS. TOXICITY TESTS CAN BE USED TO MEASURE TOXICITY, ESTIMATE ADDITIONAL REMOVAL NECESSARY TO AVIOD IMPACT, ESTABLISH PERMIT LIMITS AND FOR COMPLIANCE MONITORING. TOXICITY TESTS ARE A DIRECT MEASURE OF THE EFFECT FOR WHICH CONTROL IS SOUGHT AND OFTEN ARE CHEAPER THAN CHEMICAL ANALYSES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012115

PUBLICATION DATE: 83

TITLE: POND SYSTEMS FOR THE PURIFICATION AND DISPOSAL OF DOMESTIC WASTEWATER FROM SMALL COMMUNITIES: USE, DESIGN, OPERATION AND MAINTENAN

PERSONAL AUTHOR: DREWS, R. J. L. C.

DESCRIPTOR: *DESIGN; COSTS; DOMESTIC WASTES; MANUALS; PONDS; *POND SYSTEMS; *MAINTENANCE; *OPERATIONS (WASTEWATER); RURAL AREAS; SMALL COMMUNITIES; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 53P. PRICE CODE: PC E04/MF E01. ORDER NO.: PB85-114528/WEP.

ABSTRACT: POND SYSTEMS PROVIDE A LOW COST MEANS OF HANDLING THE DOMESTIC WASTEWATER FROM SMALL COMMUNITIES. THEIR FUNCTION RELIES ON THE NATURAL SELF-PURIFICATION PROCESS - BASICALLY PHOTOSYNTHETIC OXIDATION - THAT OCCURS IN A BODY OF WATER AND IS DEPENDENT ON NATURAL FACTORS SUCH AS SUNSHINE, TEMPERATURE AND WIND ACTION. THE LONGER THE EXPOSURE OF THE WATER TO SUCH FAVORABLE CONDITIONS THE BETTER THE PURIFICATION IS LIKELY TO BE. THIS MANUAL APPLIES EXCLUSIVELY TO POND SYSTEMS FOR THE TREATMENT OF DOMESTIC

WASTES. IF ANY SUCH SYSTEM ISCONTEMPLATED FOR THE TREATMENT OF INDUSTRIAL WASTES, SPECIFIC INVESTIGATIONS ARE NECESSARY TO ESTABLISH THE CRITERIA FOR CONSTRUCTION OF A SYSTEM WHICH WILL PRODUCE AN EFFLUENT OF THE DESIRED QUALITY. SEPARATE TREATMENT BY EVAPORATION MUST OFTEN BE RESORTED TO, IN WHICH CASE THE NUISANCE AND GROUNDWATER POLLUTION ASPECTS NEED CAREFUL CONSIDERATION.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012116

PUBLICATION DATE: 84

TITLE: PESTICIDE PRODUCT INFORMATION ON MICROFICHE, SET A.

DESCRIPTOR: *CHEMICALS; *PESTICIDES; *PRODUCT INFORMATION; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 80P. ORDER NO.: PB84-922000/WEP

ABSTRACT: SINCE 1970 WHEN THE U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) WAS GIVEN THE RESPONSIBILITY OF REGULATING ALL ASPECTS OF PESTICIDES, THE AGENCY HAS AMASSED, THROUGH THE REGISTRATION PROCESS, AN EXTENSIVE COMPUTER DATA SYSTEM ON MOST FEDERALLY REGISTERED PESTICIDE PRODUCTS. THE INFORMATION INCLUDES PRODUCT NAMES, MANUFACTURES' NAMES AND ADDRESSES, ACTIVE INGREDIENTS, TOLERANCES FOR RESIDUES, AND SITE AND PEST INFORMATION FOR PARTICULAR PRODUCTS AND ACTIVE CHEMICAL INGREDIENTS. SET A CONTAINS THE PRODUCT MANAGER ASSIGNMENTS; PESTICIDE PRODUCTS, NUMERICALLY AND ALPHABETICALLY; PESTICIDE COMPANIES, NUMERICALLY AND ALPHABETICALLY; CHEMICAL REFERENCE FILE, ALPHABETICALLY AND NUMERICALLY; TOLERANCE FILE BY CHEMICAL AND COMMODITY; INVERTED CHEMICAL/REGISTRATION NUMBERS; AND PESTICIDE LABEL DATA.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012117

PUBLICATION DATE: 85

TITLE: POLYCHLORINATED BIPHENYLS: OCCURENCE IN SEDIMENTS AND SOILS. 1977-JAN 1985 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *CHEMICAL ANALYSIS; *DECOMPOSITION; *DETECTION METHODS; *POLYCHLORINATED BIPHENYLS; *SEDIMENTS; *SOILS; *SITE STUDIES

DESCRIPTIVE NOTE: 140P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-853836/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING FIELD AND LABORATORY ANALYSES OF POLYCHLORINATED BIPHENYLS IN SEDIMENTS AND SOILS. TOPICS TREATED ARE SITE STUDIES, CHEMICAL ANALYSES OF ADSORPTION-DESORPTION PROCESSES, DECOMPOSITION IN SOILS, INCLUDING-BIODEGRADATION, AND BIOACCUMULATION. DETECTION METHODS AND EQUIPMENT, AND THE IMPACT OF DREDGING IN CONTAMINATED AREAS ARE ALSO DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 130 CITATIONS, 17 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012118

PUBLICATION DATE: 85

TITLE: GROUNDWATER POLLUTION MONITORING. 1976-JANUARY 1985 (CITATIONS FROM THE ENERGY DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *GROUNDWATER; *MONITORING; *REGULATIONS; *WASTEWATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 217P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-853732/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE MONITORING OF VARIOUS GROUNDWATER POLLUTANTS. TOPICS INCLUDE WASTEWATER TREATMENT, WATER POLLUTION SOURCES AND CONTROL, WATER QUALITY STANDARDS, AND GROUNDWATER MOVEMENT. MONITORING METHODS, CONTAMINATION MIGRATION, AND POLLUTION REGULATIONS ARE DISCUSSED. (THIS UPDATE BIBLIOGRAPY CONTAINS 218 CITATIONS, 65 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012119

PUBLICATION DATE: 84

TITLE: REFERENCE MATERIALS AND ENVIRONMENTAL ANALYSIS.

PERSONAL AUTHOR: RASBERRY, S. D., AND REED, W. P.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ENVIRONMENTAL ANALYSIS; *MEASUREMENT; *STANDARD REFERENCE MATERIALS

DESCRIPTIVE NOTE: ORDER NO.: PB85-142214

ABSTRACT: ACCURATE MEASUREMENTS ARE AN IMPORTANT CONSIDERATION IN ENVIRONMENTAL ANALYSIS. THE NATIONAL BUREAU OF STANDARDS (NBS) PROVIDES SEVERAL TYPES OF SERVICES TO AID ANALYSTS IN OBTAINING ACCURATE MEASUREMENTS AND IN VALIDATING THE ACCURACY OF MEASUREMENT METHODS AND MEASUREMENT SYSTEMS. THE MOST WELL KNOWN OF THESE SERVICES IS STANDARD REFERENCE MATERIALS (SRMS). IN GENERAL, SRMS ARE WELL-CHARACTERIZED HOMOGENEOUS MATERIALS OR SIMPLE ARTIFACTS WITH SPECIFIC CHEMICAL OR PHYSICAL PROPERTIES CERTIFIED BY NBS. THIS PAPER DISCUSSES VARIOUS POSSIBLE ROLES FOR THE USE OF SRMS, TOGETHER WITH A DESCRIPTION OF CURRENTLY AVAILABLE

SRMS. IN ADDITION, A BRIEF DISCUSSION OF THE TECHNOLOGY OF CERTIFICATION HAS BEEN INCLUDED AS WELL AS SOME DISCUSSION OF FUTURE ACTIVITIES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012120

PUBLICATION DATE: DEC 84

TITLE: EUTROPHIC LAKES. 1978-1984 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *EUTROPHIC LAKES; *LAKES; *NUTRIENT LOADING; *RESEARCH REPORTS; *WATER QUALITY

DESCRIPTIVE NOTE: 147P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-853000/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING CAUSES, EFFECTS, AND VARIOUS APPROACHES IN LIMITING NUTRIENT LOADING INTO EUTROPHIC LAKES THROUGHOUT THE WORLD. NUTRIENT REMOVAL TREATMENT AND PERFORMANCE IS INCLUDED IN ANOTHER BIBLIOGRAPHY. EUTROPHIC LAKE IDENTIFICATION, AND ECOLOGICAL AND LIMNOLOGICAL STUDIES OF EUTROPHIC LAKE DEVELOPMENT AND RESTORATION ARE PRESENTED. PHOSPHORUS AND NITROGEN CONCENTRATIONS IN LAKES AND LAKE WATER QUALITY ANALYSIS ARE DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 136 CITATIONS, 33 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012121

PUBLICATION DATE: 84

TITLE: METALS RECOVERY FROM WASTES. 1966-1984 (CITATIONS FROM THE METALS ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *INDUSTRIAL WASTES; *METALS; *METAL RECOVERY; *RECYCLING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 96P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-852986/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE RECOVERY AND RECYCLING OF REUSE OF FERROUS AND NONFERROUS METALS FROM VARIOUS INDUSTRIAL WASTES, ESPECIALLY WASTE WATERS. (THIS UPDATED BIBLIOGRAPHY CONTAINS 173 CITATIONS, 12 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012122

PUBLICATION DATE: DEC 84

TITLE: METHANE FROM SOLID WASTES. 1974-NOVEMBER 1984 (CITATIONS FROM THE ENGINEERING INDEX DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *ENERGY; *ENERGY CONSERVATION; METHANE; *RECYCLING; *SOLID WASTES

DESCRIPTIVE NOTE: 80P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-853224/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE PRODUCTION OF METHANE FROM SOLID WASTES. THE CITATIONS COVER THE MICROBIAL AND CHEMICAL PROCESSES, THE DESIGN AND OPERATION OF THE DIGESTER EQUIPMENT, AND REPORTS ON METHANE PRODUCTION FROM SANITARY LANDFILLS AND AGRICULTURE WASTES. (THIS UPDATED BIBLIOGRAPHY CONTAINS 106 CITATIONS, 24 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012124

PUBLICATION DATE: 84

TITLE: METALS RECOVERY FROM WASTES. JUNE 1970-1984 (CITATIONS FROM THE ENGINEERING INDEX DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *METAL RECOVERY; *METALS; *INDUSTRIAL WASTES; *RECYCLING; *RESEARCH REPORTS; *WASTE WATER TREATMENT

DESCRIPTIVE NOTE: 155P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-852978/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE RECOVERY AND RECYCLING OR REUSE OF FERROUS AND NONFERROUS METALS FROM VARIOUS INDUSTRIAL WASTES, ESPECIALLY WASTE WATERS. (THIS UPDATED BIBLIOGRAPHY CONTAINS 225 CITATIONS, 25 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012125

PUBLICATION DATE: DEC 84

TITLE: SUMMARY REPORT OF THE WORKSHOP ON STRUCTURE ACTIVITY CONCEPTS IN ENVIRONMENTAL SCIENCES.

PERSONAL AUTHOR: MEADER, M. W.

DESCRIPTOR: *CHEMICALS; *CHEMICAL EVALUATION; *HAZARD ASSESSMENT; *REPORTS; *RESEARCH PRIORITIES; *STRUCTURE

ACTIVITY RELATIONSHIPS; *WORKSHOPS

DESCRIPTIVE NOTE: 308P. PRICE CODE: PC A14/MF A01. ORDER NO.: PB85-137339/WEP

ABSTRACT: THE THEORETICAL AND PRACTICAL CONSIDERATIONS IN THE APPLICATION OF STRUCTURE-ACTIVITY RELATIONSHIPS (SAR) TO CHEMICAL HAZARD ASSESSMENT HAVE BEEN THE SUBJECT OF MUCH RESEARCH AND DEBATE. IN ORDER TO FOCUS THIS RESEARCH ON PRODUCING THE MOST COST-EFFECTIVE METHODS OF CHEMICAL EVALUATION, EPA SPONSORED A WORKSHOP ON SAR IN ENVIRONMENTAL SCIENCES IN SAN ANTONIO, TEXAS. EXPERTS FROM INDUSTRY, ACADEMIA AND GOVERNMENT WERE INVITED TO EXAMINE THE STATE-OF-THE-ART OF CURRENT SAR METHODS, THE LIMITATIONS OF SAR FOR EPAS MISSION, AND DEVELOP RESEARCH PRIORITIES FOR SAR OVER THE NEXT TWO YEARS. THIS REPORT IS A SUMMARY OF THE WORKSHOP FINDINGS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012126

PUBLICATION DATE: 85

TITLE: TOXICITY OF HALOGENATED ORGANIC COMPOUNDS. NOVEMBER 1981-FEBRUARY 1983 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *HALOGENATED ORGANIC COMPOUNDS; *ENVIRONMENTAL EFFECTS; *HEALTH; *ORGANIC COMPOUNDS; PESTICIDES; *RESEARCH REPORTS; SOLVENTS; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 212P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-853612/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING HEALTH AND ENVIRONMENTAL EFFECTS OF HALOGENATED ORGANIC COMPOUNDS. TOPICS INCLUDE LABORATORY AND FIELD INVESTIGATIONS REGARDING BIOACCUMULATION AND CONCENTRATION, METABOLIC ASPECTS, AND SPECIFIC SITE STUDIES IN INDUSTRIAL AND COMMERCIAL OPERATIONS. PESTICIDES, SOLVENTS, AND A VARIETY OF INDUSTRIAL COMPOUNDS ARE DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 231 CITATIONS, NONE OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012127

PUBLICATION DATE: 85

TITLE: TOXICITY OF HALOGENATED ORGANIC COMPOUNDS. MARCH 1983-JANUARY 1985 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *HALOGENATED ORGANIC COMPOUNDS; *ENVIRONMENTAL EFFECTS; *HEALTH; *ORGANIC COMPOUNDS; PESTICIDES; *RESEARCH REPORTS; SOLVENTS; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 167P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-853620/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING HEALTH AND ENVIRONMENTAL EFFECTS OF HALOGENATED ORGANIC COMPOUNDS. TOPICS INCLUDE LABORATORY AND FIELD INVESTIGATIONS REGARDING BIOACCUMULATION AND CONCENTRATION, METABOLIC ASPECTS, AND SPECIFIC SITE STUDIES IN INDUSTRIAL AND COMMERCIAL OPERATIONS. PESTICIDES, SOLVENTS, AND A VARIETY OF INDUSTRIAL COMPOUNDS ARE DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 131 CITATIONS, NONE OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012128

PUBLICATION DATE: 85

TITLE: TRENDS IN DRINKING WATER TREATMENT: THE SHAPE OF THINGS TO COME. PART II - NEW DEVELOPMENTS IN WATER TREATMENT.

PERSONAL AUTHOR: FULTON, GEORGE P.

DESCRIPTOR: *DRINKING WATER; *OPERATIONS (WATER); *RESEARCH; *TECHNOLOGY; *TRENDS; *UNIT PROCESSES; *WATER TREATMENT

DESCRIPTIVE NOTE: 56-60P.

ABSTRACT: PRESENT TRENDS AND FUTURE DIRECTIONS FOR TREATMENT OF DRINKING WATER ARE EXAMINED IN THIS SECOND PART OF A SERIES.

AVAILABILITY: PUBLIC WORKS; V116 N3

IRIS ACCESSION NUMBER: EW012129

PUBLICATION DATE: 85

TITLE: A PRETREATMENT PLANT UNDER EVERY LAWN.

PERSONAL AUTHOR: CLARIDA, GLENN

DESCRIPTOR: *FACILITIES; *ILLINOIS; *LIFT STATIONS; *OPERATIONS (WASTEWATER); *PUMPS; *RETROFITTING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 22-23P.

ABSTRACT: DESCRIBED ARE STRUCTURAL MODIFICATIONS AND A SET OF EFFICIENT NEW PUMPS HAVE TURNED A FORMERLY UNDEPENDABLE AND UNDER-CAPACITY WASTEWATER LIFT STATION INTO A RELIABLE FACILITY.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N4

IRIS ACCESSION NUMBER: EW012130

PUBLICATION DATE: 85

TITLE: CONSTRUCTING THE EGG: CONCRETE OR STEEL?

PERSONAL AUTHOR: HILLS, RICHARD E.; MALINOWSKI, JOHN T.

DESCRIPTOR: *COSTS; *ANAEROBIC SLUDGE DIGESTERS; *DESIGN; *DIGESTERS; CONCRETE; *FACILITIES; *OPERATIONS (WASTEWATER); STEEL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 27-30P.

ABSTRACT: DESCRIBED ARE FOUR EGG-SHAPED ANAEROBIC SLUDGE DIGESTERS IN LOS ANGELES. THE DIGESTERS IN LOS ANGELES WERE CONSTRUCTED OF CONCRETE. COMPARISONS ARE MADE BETWEEN DIGESTERS CONSTRUCTED FROM CONCRETE AND STEEL.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N4

IRIS ACCESSION NUMBER: EW012131

PUBLICATION DATE: 85

TITLE: UPGRADING WASTEWATER LAGOON EFFLUENTS WITH THE UV/SEDIMENTATION PROCESS.

PERSONAL AUTHOR: BORUP, M. BRETT; ADAMS, V. DEAN

DESCRIPTOR: *EFFLUENTS; *LAGOONS; *OPERATIONS (WASTEWATER); *STABILIZATION PONDS; *SUSPENDED SOLIDS; *UV/SEDIMENTATION PROCESS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 196-200P.

ABSTRACT: DESCRIBED IS A PROCESS THAT REMOVED UP TO 54% OF SUSPENDED SOLIDS AND SHOWS PROMISE FOR SEASONAL USE DURING PERIODS WHEN EFFLUENT SUSPENDED SOLIDS ARE HIGH.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N3

IRIS ACCESSION NUMBER: EW012132

PUBLICATION DATE: 85

TITLE: PRODUCTION, DEGRADATION, AND COMPOSITION OF ACTIVATED SLUDGE IN AERATION SYSTEMS WITHOUT PRIMARY SEDIMENTATION.

PERSONAL AUTHOR: CHUDOBA, JAN; TUCEK, FERDINAND

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ACTIVATED SLUDGE; *AERATION SYSTEMS; *MASS BALANCE; *OPERATIONS (WASTEWATER); *ORGANICS; *PREDICTION; *SLUDGE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 201-06P.

ABSTRACT: EQUATIONS CAN BE DERIVED TO PREDICT THE AMOUNTS

OF DEGRADABLE ORGANICS, NONDEGRADABLE ORGANICS, AND MINERAL SOLIDS IN THE SLUDGE MASS. THIS PAPER DESCRIBES HOW PREDICTIONS CAN BE MADE.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N3

IRIS ACCESSION NUMBER: EW012133

PUBLICATION DATE: 83

TITLE: MASTER PLANNING A WATER REUSE SYSTEM.

PERSONAL AUTHOR: CORNEILLE, RICHARD

DESCRIPTOR: *CALIFORNIA; *CONSERVATION; *ECONOMICS; *OPERATIONS (WASTEWATER); *PLANNING; *RECLAIMED WATER; *RECYCLING; *WASTEWATER TREATMENT; *WATER RESOURCES; *WATER CONSERVATION

DESCRIPTIVE NOTE: 207-12P.

ABSTRACT: DESCRIBED IS A WASTEWATER REUSE SYSTEM WITH ADEQUATE HEALTH SAFEGUARDS THAT WILL REDUCE POTABLE WATER DEMAND BY 20%.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N3

IRIS ACCESSION NUMBER: EW012134

PUBLICATION DATE: 83

TITLE: DESIGN AND OPERATIONS OF AN AERATED WINDROW COMPOSTING FACILITY.

PERSONAL AUTHOR: KUCHENRITHER, R. D.; AND OTHERS

DESCRIPTOR: *COLORADO; *COMPOSTING; *ECONOMICS; FERTILIZER; FACILITIES; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *SLUDGE; PILOT PLANTS; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 213-19P.

ABSTRACT: DESCRIBED IS THE DESIGN AND OPERATION OF A COMPOSTING DEMONSTRATION FACILITY IN COLORADO. THE PRODUCTION OF COMPOST IN THE PROPOSED FACILITY WILL FILL ONLY 1% OF THE REGIONS DEMAND FOR THE MATERIAL.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N3

IRIS ACCESSION NUMBER: EW012135

PUBLICATION DATE: 83

TITLE: THE DESIGN OF A SELECTOR TO CONTROL LOW-F/M

FILAMENTOUS BULKING.

PERSONAL AUTHOR: DAIGGER, GLEN T.; AND OTHERS

DESCRIPTOR: *BULKING; *DESIGN; *OPERATIONS (WASTEWATER); *SLUDGE BULKING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 220-26P.

ABSTRACT: DESCRIBED IS THE DESIGN OF A SELECTOR TO CONTROL BULKING. THE ADDITION OF A MIXING ZONE FOR PRIMARY EFFLUENT AND RETURN OF ACTIVATED SLUDGE SHOULD CONTROL WINTERTIME SLUDGE BULKING.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N3

IRIS ACCESSION NUMBER: EW012136

PUBLICATION DATE: 85

TITLE: FINAL SETTLER PERFORMANCE DURING TRANSIENT LOADING.

PERSONAL AUTHOR: CHAPMAN, DAVID T.

DESCRIPTOR: *DESIGN; *CLARIFIERS; *EXPERIMENTAL FACILITIES; *FACILITIES; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *SETTLERS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 227-34P.

ABSTRACT: CLARIFIER RESPONSES FLOW CHANGES ARE NON-LINEAR; THEREFORE, CONTROL STRATEGIES THAT GENERATE FLOW TRANSIENTS SHOULD BE AVOIDED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N3

IRIS ACCESSION NUMBER: EW012142

PUBLICATION DATE: 85

TITLE: TRENDS IN DRINKING WATER TREATMENT: THE SHAPE OF THINGS TO COME. PART 1 - REGULATORY DIRECTION.

PERSONAL AUTHOR: FULTON, GEORGE P.

DESCRIPTOR: *DRINKING WATER; *FACILITIES; *OPERATIONS (WATER); *REGULATIONS; *TRENDS; *WATER QUALITY; *WATER TREATMENT

DESCRIPTIVE NOTE: 53-57P.

ABSTRACT: CHANGING TECHNOLOGY IN WATER TREATMENT HAS BEEN PRECIPITATED BY THE SAFE DRINKING WATER ACT. PART 1 OF A THREE-PART SERIES EXAMINES NEW TREATMENT DIRECTIONS.

AVAILABILITY: PUBLIC WORKS; V116 N4

IRIS ACCESSION NUMBER: EW012143

PUBLICATION DATE: 85

TITLE: CONTRACT OPERATIONS SAVE OVER $1 MILLION.

PERSONAL AUTHOR: GIROUARD, RICHARD J.; PHILLIPS, DAVID L.

DESCRIPTOR: *ADVANCED WASTEWATER TREATMENT; *CONTRACT SERVICES; *COSTS; *COMPLIANCE; *MAINTENANCE; *OPERATIONS (WASTEWATER); *PERSONNEL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 60-62P.

ABSTRACT: OPERATING COSTS AT A NEW ADVANCED WASTEWATER TREATMENT PLANT WERE LOWERED BY A CONTRACT OPERATION. EFFLUENTS WERE ALSO BROUGHT INTO COMPLIANCE.

AVAILABILITY: PUBLIC WORKS; V116 N4

IRIS ACCESSION NUMBER: EW012144

PUBLICATION DATE: 85

TITLE: A UTILITY APPROACH TO COMPREHENSIVE STORMWATER MANAGEMENT.

PERSONAL AUTHOR: ENGEMOEN, MARC; KREMPEL, ROGER E.

DESCRIPTOR: *COLORADO; *DRAINAGE; *COSTS; *FUNDING; *MANAGEMENT; *PLANNING; *SURFACE RUNOFF; *STORMWATER; *STORMWATER UTILITIES

DESCRIPTIVE NOTE: 68-71, 92P.

ABSTRACT: DESCRIBED IS A SELF-SUPPORTING STORM DRAINAGE UTILITY FINANCED BY A COMBINATION OF MONTHLY UTILITY FEES AND DEVELOPMENT FEES.

AVAILABILITY: PUBLIC WORKS; V116 N4

IRIS ACCESSION NUMBER: EW012145

PUBLICATION DATE: 85

TITLE: PROGRAM DESIGNED TO REDUCE WATER USE.

PERSONAL AUTHOR: BRENNAN, MIKE

DESCRIPTOR: *ARIZONA; *CONSERVATION; *INCENTIVES; *LANDSCAPING; *WATER CONSERVATION; *WATER RESOURCES; *WATER USE

DESCRIPTIVE NOTE: 76-77P.

ABSTRACT: DESCRIBED IS A PROGRAM IN MESA, ARIZONA THAT ENCOURAGES DEVELOPERS TO INSTALL LOW-WATER-USE LANDSCAPING.

AVAILABILITY: PUBLIC WORKS; V116 N4

IRIS ACCESSION NUMBER: EW012146

PUBLICATION DATE: 85

TITLE: ODOR PROBLEMS SOLVED WITH BIOLOGICAL AIR PURIFICATION SYSTEM.

PERSONAL AUTHOR: SELBY, MARK; EPSTEIN, ELIOT

DESCRIPTOR: *AIR PURIFICATION SYSTEMS; *BIOLOGICAL TREATMENT; *FACILITIES; HYDROGEN SULFIDE; METHANE; *ODORS; *OPERATIONS (WASTEWATER); SULFUR DIOXIDE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 78-79, 92P.

ABSTRACT: DESCRIBED IS AN AIR PURIFICATION SYSTEM TO SOLVE ODOR PROBLEMS EMANATING FROM A WASTEWATER TREATMENT PLANT.

AVAILABILITY: PUBLIC WORKS; V116 N4

IRIS ACCESSION NUMBER: EW012147

PUBLICATION DATE: 85

TITLE: A TEMPORARY OPERATING LIFT FACILITY.

PERSONAL AUTHOR: TOLF, ROBERT D.

DESCRIPTOR: *FLOODING; *LIFT STATIONS; *MAINTENANCE; *OPERATIONS (WASTEWATER); PUMPS; *SEWERS; *WASTEWATER COLLECTION; WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 80-81P.

ABSTRACT: BASEMENT FLOODING PROBLEMS IN A LOW LYING AREA WERE SOLVED BY A LIFT STATION THAT WILL OPERATE WHEN NEEDED.

AVAILABILITY: PUBLIC WORKS; V116 N4

IRIS ACCESSION NUMBER: EW012148

PUBLICATION DATE: 85

TITLE: BROMIDE-OXIDANT INTERACTIONS AND THM FORMATION: A LITERATURE REVIEW.

PERSONAL AUTHOR: COOPER, WILLIAM J.; AND OTHERS

DESCRIPTOR: *CHEMISTRY; *DISINFECTION; *CHEMICAL REACTIONS; *LITERATURE REVIEWS; *THM; *TRIHALOMETHANES; *WATER TREATMENT; *WASTEWATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 116-21P.

ABSTRACT: THIS COMPREHENSIVE LITERATURE REVIEW IDENTIFIES THE EXISTING DATA ON THM FORMATION RESULTING FROM THE REACTIONS OF BROMIDE WITH WATER TREATMENT OXIDANTS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77

N4

IRIS ACCESSION NUMBER: EW012149

PUBLICATION DATE: 85

TITLE: ORGANIC HALOGEN MEASUREMENTS: CURRENT USES AND FUTURE PROSPECTS.

PERSONAL AUTHOR: STEVENS, ALAN A.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHEMICAL REACTIONS; *DRINKING WATER; *HALOGENS; *INDICATORS; *LABORATORY PROCEDURES; *ORGANIC HALIDES; *WATER QUALITY; *WATER TREATMENT

DESCRIPTIVE NOTE: 146-54P.

ABSTRACT: TOTAL ORGANIC HALIDE IS A USEFUL INDICATOR OF WATER QUALITY. IN SOME CASES ITS USE ELIMINATES THE NEED FOR A VARIETY OF METHODS. CURRENT USES AND FUTURE PROSPECTS ARE DESCRIBED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N4

IRIS ACCESSION NUMBER: EW012150

PUBLICATION DATE: 85

TITLE: SLUDGE COMPOSTING: LEARNING FROM EXPERIENCE.

PERSONAL AUTHOR: YEAMAN, BARBARA; WALKER, JOHN

DESCRIPTOR: *COMPOSTING; DESIGN; *FACILITIES; *MARYLAND; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; SLUDGE; *SLUDGE COMPOSTING; WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 10-14P.

ABSTRACT: THIS ARTICLE DISCUSSES THE MONTGOMERY COUNTY, MARYLAND COMPOSTING FACILITY. THE PLANT USES THE AERATED STATIC PILE METHOD DEVELOPED BY THE U.S. DEPARTMENT OF AGRICULTURE.

AVAILABILITY: OPERATIONS FORUM; V2 N4

IRIS ACCESSION NUMBER: EW012151

PUBLICATION DATE: 85

TITLE: SLUDGE SOLUTIONS FROM SEATTLE TO BANGOR.

PERSONAL AUTHOR: BEATTY, ALIX

DESCRIPTOR: COMPOSTING; COSTS; LAND APPLICATION; METHANE; *OPERATIONS (WASTEWATER); *SLUDGE; *SLUDGE DISPOSAL; *WASTE DISPOSAL; WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 19-22P.

ABSTRACT: DESCRIBED ARE APPROACHES BY SEVERAL CITIES FOR SLUDGE DISPOSAL. EXAMPLES ARE GIVEN FOR SEVERAL WAYS OF USING SLUDGE AND GAINING SOME FINANCIAL RETURN.

AVAILABILITY: OPERATIONS FORUM; V2 N4

IRIS ACCESSION NUMBER: EW012152

PUBLICATION DATE: 85

TITLE: BIOMONITORING FOR TOXICS CONTROL IN NPDES PERMITTING.

PERSONAL AUTHOR: ROOP, R. D.; HUNSAKER, C. T.

DESCRIPTOR: *BIOMONITORING; *COMPLIANCE; *EFFLUENTS; *NPDES; *PERMITS; *TOXIC SUBSTANCES; *USEPA; *WORKSHOPS; *WATER QUALITY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 271-77P.

ABSTRACT: THIS ARTICLE SUMMARIZES MAJOR TOPICS DISCUSSED AT A WORKSHOP ON BIOMONITORING FOR NPDES COMPLIANCE. TOPICS INCLUDED EPA'S PROPOSED APPROACH TO BIOMONITORING AND IMPORTANT ISSUES SURROUNDING THE USE OF BIOMONITORING TECHNIQUES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N4

IRIS ACCESSION NUMBER: EW012153

PUBLICATION DATE: 85

TITLE: ALTERNATIVE SLUDGE HANDLING AND DISPOSAL AT KENT COUNTY, DELAWARE.

PERSONAL AUTHOR: PIZARRO, DANA R.

DESCRIPTOR: CONSTRUCTION; *DELAWARE; COSTS; DEWATERING; *LAND APPLICATION; MAINTENANCE; *OPERATIONS (WASTEWATER); *SLUDGE; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 278P. 84

ABSTRACT: DESCRIBED ARE FACILITIES FOR HANDLING AND DISPOSING OF SLUDGE IN DELAWARE. THE LAND APPLICATION PROGRAM IS DESCRIBED. CONSTRUCTION, OPERATIONS, AND MAINTENANCE COSTS ARE PRESENTED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N4

IRIS ACCESSION NUMBER: EW012154

PUBLICATION DATE: 85

TITLE: OVERLAND FLOW WASTEWATER TREATMENT AT EASLEY, S.C.

PERSONAL AUTHOR: ABERNATHY, AL. RAY; AND OTHERS

DESCRIPTOR: *FACILITIES; *MODELS; *OVERLAND FLOW; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *SOUTH CAROLINA; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 291-99P.

ABSTRACT: DESCRIBED IS AN OVERLAND FLOW WASTEWATER TREATMENT FACILITY IN SOUTH CAROLINA. DATA OBTAINED FROM THE FACILITY ARE COMPARED WITH RESULTS OBTAINED FROM PREVIOUS STUDIES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N4

IRIS ACCESSION NUMBER: EW012155

PUBLICATION DATE: 85

TITLE: APPLICATION REVIEWS '85. WATER ANALYSIS.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ANALYTICAL CHEMISTRY; *INORGANIC ANALYSIS; INORGANIC COMPOUNDS; LABORATORY PROCEDURES; *ORGANIC ANALYSIS; ORGANIC COMPOUNDS; *LITERATURE REVIEWS; *RESEARCH REVIEWS; SAMPLING; *WATER; *WASTEWATER

DESCRIPTIVE NOTE: 46R-88RP.

ABSTRACT: THIS IS THE 21ST. BIENNIAL REVIEW OF THE INORGANIC AND ORGANIC ANALYTICAL CHEMISTRY OF WATER. REFERENCES USED IN COMPILING THE REVIEW WERE COMPILED FROM NEARLY 60 MAJOR JOURNALS PUBLISHED BETWEEN OCT. 1982 THROUGH SEP. 1984.

AVAILABILITY: ANALYTICAL CHEMISTRY; REVIEW FOR 1985

IRIS ACCESSION NUMBER: EW012176

PUBLICATION DATE: 85

TITLE: TASTES AND ODORS: THE FLAVOR PROFILE METHOD.

PERSONAL AUTHOR: KRASNER, STUART W.; AND OTHERS

DESCRIPTOR: *CALIFORNIA; *DRINKING WATER; FLAVOR PROFILE METHOD; *ODORS; *OPERATIONS (WATER); *TASTES; *WATER TREATMENT

DESCRIPTIVE NOTE: 34-39P.

ABSTRACT: A METHODICAL APPROACH TO IDENTIFYING AND QUANTIFYING TASTES AND ODORS USED IN SOUTHERN CALIFORNIA IS

DESCRIBED. A FLAVOR PROFILE PANEL HAS BEEN SELECTED AND TRAINED IN THE METHOD, AND A LIBRARY OF REFERENCE MATERIALS HAS BEEN DEVELOPED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N3

IRIS ACCESSION NUMBER: EW912177

PUBLICATION DATE: 85

TITLE: AN EVALUATION OF PUBLIC NOTIFICATION REQUIREMENTS IN CALIFORNIA.

PERSONAL AUTHOR: BRUVOLD, WILLIAM H.; AND OTHERS

DESCRIPTOR: *CALIFORNIA; *CONTAMINATION; *CONTAMINATION VIOLATIONS; *DRINKING WATER; PUBLIC EDUCATION; *PUBLIC NOTIFICATION; PUBLIC PARTICIPATION; *REGULATIONS; *SURVEYS; *WATER TREATMENT

DESCRIPTIVE NOTE: 40-43P.

ABSTRACT: THE PUBLIC NOTIFICATION REQUIREMENTS OF VIOLATIONS OF MAXIMUM CONTAMINANT LEVELS (MCL'S) IN DRINKING WATER WERE EVALUATED THROUGH A SCIENTIFIC SAMPLING OF RESIDENTS OF 15 CALIFORNIA COMMUNITIES. THIS ASSESSMENT OF THE VALUE OF THE REQUIREMENT POINTS TO WAYS IN WHICH THE STATED OBJECTIVES COULD BE REACHED MORE SUCCESSFULLY.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N3

IRIS ACCESSION NUMBER: EW912178

PUBLICATION DATE: 85

TITLE: USING POLYMERS WITH DIRECT FILTRATION.

PERSONAL AUTHOR: CARNS, KEITH E.; PARKER, JUDITH DICKSON

DESCRIPTOR: *CALIFORNIA; *COAGULATION; *DRINKING WATER; *FILTRATION; *OPERATIONS (WATER); *PERFORMANCE EVALUATION; *POLYMERS; *WATER TREATMENT

DESCRIPTIVE NOTE: 44-49P.

ABSTRACT: THE TASTING EVALUATION PROGRAM UNDERTAKEN BY THE EAST BAY MUNICIPAL UTILITY DISTRICT RELATED TO CLAY-POLYMER COAGULATION PROCESSES IS DESCRIBED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N3

IRIS ACCESSION NUMBER: EW012179

PUBLICATION DATE: 85

TITLE: REMOVING COLOR CAUSED BY HUMIC ACIDS.

PERSONAL AUTHOR: EDWARDS, GERALD A.; AMIRTHARAJAH, A.

DESCRIPTOR: *COAGULATION; *COLOR; *DRINKING WATER; *HUMIC ACIDS; *OPERATIONS (WATER); *PERFORMANCE EVALUATION; *WATER TREATMENT

DESCRIPTIVE NOTE: 50-57P.

ABSTRACT: DIAGRAMS SHOWING OPTIMUM DOMAINS FOR REMOVING COLOR BY HUMIC ACIDS WERE DEVELOPED AND ARE DESCRIBED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N3

IRIS ACCESSION NUMBER: EW012180

PUBLICATION DATE: 85

TITLE: POLYELECTROLYTE SELECTION FOR WATER TREATMENT.

PERSONAL AUTHOR: GHOSH, MRIGANKA M.; AND OTHERS

DESCRIPTOR: *DRINKING WATER; *FILTRATION; *FLOCULANTS; *OPERATIONS (WATER); *PERFORMANCE EVALUATION; *POLYELECTROLYTES; *RESEARCH REPORTS; *WATER TREATMENT; *POLYMERS

DESCRIPTIVE NOTE: 67-73P.

ABSTRACT: BEFORE AN EFFECTIVE METHOD OF POLYMER SELECTION CAN BE DEVISED, A BASIC UNDERSTANDING MUST BE GAINED OF THE INTERRELATIONSHIP BETWEEN POLYMER MOLECULAR WEIGHT, CHARGE DENSITY, POLYMER DOSAGE, MIXING CONDITIONS, AND THE FLOCCULATED PARTICLE-SIZE DISTRIBUTION. A SERIES OF EXPERIMENTS IDENTIFIED VARIABLES TO CONSIDER IN POLYELECTROLYTE SELECTION.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N3

IRIS ACCESSION NUMBER: EW012181

PUBLICATION DATE: 85

TITLE: POLYALUMINUM CHLORIDE AND ALUM COAGULATION OF CLAY-FULVIC ACID SUSPENSIONS.

PERSONAL AUTHOR: DEMPSEY, BRIAN A.; AND OTHERS

DESCRIPTOR: *COAGULATION; *DRINKING WATER; *OPERATIONS (WATER); *POLYALUMINUM CHLORIDE; *WATER TREATMENT; *PERFORMANCE EVALUATION

DESCRIPTIVE NOTE: 74-80P.

ABSTRACT: CONDITIONS ARE OUTLINED THAT MIGHT INDICATE THE EFFECTIVENESS OF USING POLYALUMINUM CHLORIDE INSTEAD OF ALUM FOR COAGULATION.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N3

IRIS ACCESSION NUMBER: EW012182

PUBLICATION DATE: 85

TITLE: PRODUCTIVITY TIPS FOR UTILITY MANAGERS.

DESCRIPTOR: GUIDELINES; *MANAGEMENT; *MANAGERS; *PERSONNEL; *PRODUCTIVITY

DESCRIPTIVE NOTE: 14P.

ABSTRACT: TIPS FOR IMPROVING PRODUCTIVITY OF UTILITY MANAGERS ARE LISTED. COMMENTS ARE INCLUDED ON WAYS TO HELP THEMSELVES AND WAYS TO HELP STAFF.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N3

IRIS ACCESSION NUMBER: EW012183

PUBLICATION DATE: 85

TITLE: METROCOM: AN INTERACTIVE FACILITY MANAGEMENT FOR THE MODERN METROPOLIS.

DESCRIPTOR: *COMPUTER APPLICATIONS; *INFORMATION SYSTEMS; EVALUATION; *FACILITIES; *MANAGEMENT; *PLANNING; *PUBLIC WORKS; *UTILITIES; *WASTEWATER TREATMENT; *WATER TREATMENT; *TEXAS

DESCRIPTIVE NOTE: 16-18P.

ABSTRACT: DESCRIBED IS THE INTERACTIVE GEOGRAPHIC INFORMATION SYSTEM FOR THE CITY OF HOUSTON.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N3

IRIS ACCESSION NUMBER: EW012184

PUBLICATION DATE: 85

TITLE: GROUNDWATER PROTECTION: A CONTRAST IN STATE STYLE.

PERSONAL AUTHOR: MOORHOUSE, JEANETTE L.

DESCRIPTOR: *CONNECTICUT; *GROUNDWATER; *POLICIES; *NEW MEXICO; *REGULATIONS; *STATE ROLE; *WATER POLLUTION CONTROL; *WATER QUALITY; *WATER RESOURCES

DESCRIPTIVE NOTE: 23-25P.

ABSTRACT: DESCRIBED ARE GROUNDWATER PROTECTION PROGRAMS IN

CONNECTICUT AND NEW MEXICO.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N3

IRIS ACCESSION NUMBER: EW012185

PUBLICATION DATE: 83

TITLE: FILTER BED REBUILDING JOB GETS VACUUM BOOST.

PERSONAL AUTHOR: LIPP, LEN

DESCRIPTOR: *DRINKING WATER; *EQUIPMENT; *FILTRATION; *FILTER BEDS; *MAINTENANCE; *OPERATIONS (WATER); *VACUUM CLEANERS; *WATER TREATMENT

DESCRIPTIVE NOTE: 26-27P.

ABSTRACT: DESCRIBED IS THE USE OF A VACUUM CLEANER FOR REMOVING SAND AND GRAVEL FROM WATER FILTRATION BEDS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N3

IRIS ACCESSION NUMBER: EW012186

PUBLICATION DATE: 83

TITLE: WATER RESOURCE PLAN PRODUCES MULTIPLE BENEFITS.

PERSONAL AUTHOR: FRENCH, VICTOR

DESCRIPTOR: *ENGLAND; HYDROELECTRIC POWER; *NATURAL RESOURCES; *PLANNING; *PROJECT DESCRIPTIONS; RECREATION; RESERVOIRS; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: 28-30P.

ABSTRACT: PLANNERS OF A LARGE WATER RESOURCE PROJECT PLANNED FOR RECREATIONAL AREAS AND POWER GENERATION AS SIDE BENEFITS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N3

IRIS ACCESSION NUMBER: EW012187

PUBLICATION DATE: 83

TITLE: PROGRESS IN MUNICIPAL PHOSPHORUS CONTROL.

PERSONAL AUTHOR: HARTIG, JOHN H.

DESCRIPTOR: CLEANWATER ACT; *COMPLIANCE; *MICHIGAN; OPERATIONS (WASTEWATER); PERFORMANCE EVALUATION; *PHOSPHORUS; *STATE ROLE; *REGULATIONS; *TRENDS; WASTEWATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 32-33P.

ABSTRACT: DESCRIBED IS THE PHOSPHORUS CONTROL PROGRAM THAT WAS DEVELOPED IN THE STATE OF MICHIGAN AFTER THE PASSAGE OF THE CLEAN WATER ACT.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N3

IRIS ACCESSION NUMBER: EW012188

PUBLICATION DATE: 65

TITLE: TRACKING DIGESTER COVER POSITION.

PERSONAL AUTHOR: SMITH, RICHARD; NAGEL, WILLIAM

DESCRIPTOR: *CONTROLS; *ANAEROBIC DIGESTERS; *DIGESTERS; EQUIPMENT; FACILITIES; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 34-35P.

ABSTRACT: A MICROPROCESSOR-BASED SYSTEM INDICATES DIGESTER COVER POSITION ACCURATELY AND RELIABLY AT A WASTEWATER TREATMENT PLANT IN PENNSYLVANIA. THE MECHANICAL ARRANGEMENT IT REPLACED SUFFERED FROM CORROSION-CAUSED BINDING AND EVENTUALLY FAILED.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N3

IRIS ACCESSION NUMBER: EW012189

PUBLICATION DATE: 85

TITLE: A PREVENTIVE MAINTENANCE PROGRAM FOR SEWAGE LIFT STATION.

PERSONAL AUTHOR: DONDZILA, RAYMOND J.

DESCRIPTOR: FACILITIES; *LIFT STATIONS; *MAINTENANCE; *OPERATIONS (WASTEWATER); *PREVENTIVE MAINTENANCE; *PERFORMANCE EVALUATION; *WORK ORDERS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 66-67P.

ABSTRACT: COMPUTER-GENERATED WORK ORDERS GREATLY INCREASE THE EFFICIENCY OF CREWS PERFORMING PREVENTIVE MAINTENANCE FUNCTIONS ON LIFT STATIONS.

AVAILABILITY: PUBLIC WORKS; V116 N3

IRIS ACCESSION NUMBER: EW012190

PUBLICATION DATE: 85

TITLE: SPOKANE'S SLUDGE-SPREADING SUCCESS STORY.

PERSONAL AUTHOR: GORDON, CHUCK

DESCRIPTOR: *EQUIPMENT; *PERFORMANCE EVALUATION;

*SPREADERS; *SLUDGE; *WASTE DISPOSAL; WASTEWATER TREATMENT; *WASHINGTON

DESCRIPTIVE NOTE: 79-81P.

ABSTRACT: IN AN ON GOING PROGRAM, SPOKANE FOUND AN AGRICULTURE MACHINE WORKED BEST TO SPREAD SLUDGE.

AVAILABILITY: PUBLIC WORKS; V116 N3

IRIS ACCESSION NUMBER: EW912191

PUBLICATION DATE: 83

TITLE: CONTROLLING SULFIDES IN SEWAGE BY DIRECTED INJECTION OF OXYGEN.

PERSONAL AUTHOR: HOLLERBACH, GEORGE H., JR.

DESCRIPTOR: *HYDROGEN SULFIDE; *ODORS; *OXYGEN, *OPERATIONS (WASTEWATER); *SULFIDES; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 82-83P.

ABSTRACT: AN ODOR CONTROL METHOD FOR SEWERS AND TREATMENT PLANTS IS REVIEWED.

AVAILABILITY: PUBLIC WORKS; V116 N3

IRIS ACCESSION NUMBER: EW912192

PUBLICATION DATE: 83

TITLE: PRIVATIZATION FILLS THE FUNDING GAP.

PERSONAL AUTHOR: WATSON, DOUGLAS J.; JOHNSON, GERALD W.

DESCRIPTOR: *ALABAMA; *ECONOMICS; *FUNDING; *FACILITIES; *CONTRACT SERVICES; *PRIVATIZATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 91-92P.

ABSTRACT: AUBURN, ALABAMA FACED FUNDING PROBLEMS TO FINANCE NEEDED WASTEWATER FACILITIES. AFTER SUBSTANTIAL REVIEW PRIVATIZATION WAS SELECTED.

AVAILABILITY: PUBLIC WORKS; V116 N3

IRIS ACCESSION NUMBER: EW912193

PUBLICATION DATE: 83

TITLE: THE MAGIC DIAMOND.

PERSONAL AUTHOR: SNELLING, DONALD P.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ACTIVATED SLUDGE; *CLARIFIERS; *OPERATIONS (WASTEWATER); *PROCESS CONTROL;

*SLUDGE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 10-13P.

ABSTRACT: THIS ARTICLE PRESENTS A RELATIVILY QUICK AND SIMPLE METHOD OF GETTING CONTROL OVER AN ACTIVATED SLUDGE PROCESS.

AVAILABILITY: OPERATIONS FORUM; V2 N3

IRIS ACCESSION NUMBER: EW012194

PUBLICATION DATE: 85

TITLE: RESPIRATION RATE.

PERSONAL AUTHOR: MILLER, DOUGLAS LEE

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ACTIVATED SLUDGE PROCESS; *OPERATIONS (WASTEWATER); *PROCESS CONTROLS; *RESPIRATION RATE; *SLUDGE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 14-17P.

ABSTRACT: DESCRIBED IS THE RESPIRATION RATE PROCEDURE FOR INDICATING THE STABILITY OF THE SLUDGE AND THE STATUS OF THE ACTIVATED SLUDGE PROCESS.

AVAILABILITY: OPERATIONS FORUM; V2 N3

IRIS ACCESSION NUMBER: EW012196

PUBLICATION DATE: 78

TITLE: TEACHING POLICY STUDIES: WHAT AND HOW.

PERSONAL AUTHOR: COPLIN, WILLIAM D.

DESCRIPTOR: *COURSE DESIGN; *COURSE CONTENT; *INSTRUCTION; *INSTRUCTIONAL MATERIALS; *HIGHER EDUCATION; *POLICY STUDIES; *POLICIES; *TEACHING METHODS

DESCRIPTIVE NOTE: 212P.

ABSTRACT: THIS BOOK FOCUSES ON TEACHING POLICY STUDIES. IT PRESENTS IDEAS ON WHAT SHOULD BE TAUGHT AND HOW THE CONTENT SHOULD IN TAUGHT. A VARIETY OF TOPICS ARE CONSIDERED AND SEVERAL APPROACHES FOR TEACHING ARE PRESENTED.

AVAILABILITY: LEXINGTON BOOKS, D.C. HEALTH AND COMPANY, LEXINGTON, MA

IRIS ACCESSION NUMBER: EW012197

PUBLICATION DATE: 84

TITLE: HANDBOOK: SEPTAGE TREATMENT AND DISPOSAL.

DESCRIPTOR: *FACILITIES; *HANDBOOKS; *LAND DISPOSAL; *MAINTENANCE; *OPERATIONS (WASTEWATER); *SEPTAGE; *SEWAGE; *TECHNOLOGY; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 316P.

ABSTRACT: THE DEMAND FOR SEPTAGE DISPOSAL FACILITIES IS GREATER, AND IS EXPECTED TO BE EVEN GREATER IN THE NEAR FUTURE. THE PURPOSE OF THIS HANDBOOK IS TO PRESENT A FULL RANGE OF PRACTICAL ALTERNATIVES, AND PROVIDE TECHNICAL ADVICE TO AID IN THE EVALUATION OF THESE ALTERNATIVES. THIS INCLUDES GENERAL DESIGN CRITERIA AND COST INFORMATION, AS WELL AS ADVICE CONCERNING THE OPERATION AND MANAGEMENT OF SEPTAGE FACILITIES.

AVAILABILITY: USEPA, MUNICIPAL ENVIRONMENTAL RESEARCH LABORATORY, CINCINNATI, OH 45268

IRIS ACCESSION NUMBER: EW012201

PUBLICATION DATE: 85

TITLE: COAL TAR TECHNOLOGY. 1970-FEBRUARY 1985 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *COAL TAR; *POLLUTION; *RESEARCH REPORTS; *TECHNOLOGY; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 220P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-854974/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING VARIOUS ASPECTS OF COAL TAR. TOPICS INCLUDE PRODUCTION FROM COAL GASIFICATION, SYNTHESIS OF CHEMICALS FROM COAL TAR, AND CHEMICAL ANALYSES OF COAL TAR PRODUCTS. TOXICOLOGY, POLLUTION STUDIES, AND COMMERCIAL USES OF THE PRODUCT ARE ALSO DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 223 CITATIONS, 33 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012202

PUBLICATION DATE: 84

TITLE: BURYIT/ANALYZ: A COMPUTER PACKAGE FOR ASSESSMENT OF RADIOLOGICAL RISK OF LOW-LEVEL RADIOACTIVE WASTE LAND DISPOSAL. USER'S MANUAL

PERSONAL AUTHOR: FISHER, J. E.; AND OTHERS

DESCRIPTOR: *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *LAND DISPOSAL; *RADIATION; *RADIOACTIVE SUBSTANCES; *RISK ASSESSMENT; *USER MANUALS; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 137P. PRICE CODE: PC A07/MF A01

ABSTRACT: THIS REPORT IS A USER'S MANUAL FOR A PARTIALLY COMPLETED CODE FOR RISK ASSESSMENT OF A LOW-LEVEL WASTE SHALLOW-LAND BURIAL SITE, TO BE USED IN THE LICENSING OF BURIAL SITES. THIS CODE IS INTENDED AS A TOOL TO BE USED FOR CONSIDERING NUCLIDE TRANSPORT MECHANISMS, INCLUDING ATMOSPHERIC, GROUNDWATER, EROSION, AND INFILTRATION TO AN UNDERLYING AQUIFER. IT ALSO CALCULATES DOSES TO INDIVIDUALS AND THE POPULATION THROUGH DIRECT EXPOSURE, INHALATION, AND INGESTION. THE METHODOLOGY OF THE RISK ASSESSMENT IS BASED PRIMARILY ON THE RESPONSE SURFACE METHOD OF UNCERTAINTY ANALYSIS. AN EXAMPLE IS GIVEN USING THE ATMOSPHERIC TRANSPORT PATHWAY AS MODELED BY A CODE CALLED BURYIT. THE FRAMEWORK FOR USING OTHER RELEASE PATHWAYS IS DESCRIBED IN THIS MANUAL. INFORMATION ON PARAMETER UNCERTAINTIES, REFERENCE SITE CHARACTERISTICS, AND PROBABILITIES OF RELEASE EVENTS IS INCLUDED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012204

PUBLICATION DATE: 85

TITLE: MASTER ANALYTICAL SCHEME FOR ORGANIC COMPOUNDS IN WATER: PART 1. PROTOCOLS.

PERSONAL AUTHOR: PELLIZZARI, E. D.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHEMICALS; *LABORATORY PROCEDURES; *ORGANIC COMPOUNDS; *PROTOCOLS; *WATER

DESCRIPTIVE NOTE: 355P. PRICE CODE: PC A16/MF A01. ORDER NO.: PB85-154367/WEP

ABSTRACT: A MASTER ANALYTICAL SCHEME (MAS) HAS BEEN DEVELOPED FOR THE ANALYSIS OF VOLATILE (GAS CHROMATOGRAPHABLE) ORGANIC COMPOUNDS IN WATER. IN DEVELOPING THE MAS, IT WAS NECESSARY TO EVALUATE AND MODIFY EXISTING ANALYSIS PROCEDURES AND DEVELOP NEW TECHNIQUES TO PRODUCE PROTOCOLS THAT PROVIDE FOR THE COMPREHENSIVE QUALITATIVE-QUANTITATIVE ANALYSIS OF ALMOST ALL VOLATILE ORGANICS IN MANY TYPES OF WATER. THE MAS PROVIDES FOR ANALYSIS OF PURGEABLE AND EXTRACTABLE, AS WELL AS NEUTRAL AND IONIC WATER SOLUBLE, ORGANICS IN SURFACE AND DRINKING WATERS AND IN LEACHATES AND VARIOUS EFFLUENTS. NOMINAL LOWER QUANTIFIABLE LIMITS RANGE FROM 0.1 MICROGRAMS/L TO 100 MICROGRAMS/L, DEPENDING ON CHEMICAL/PHYSICAL CLASS OF THE ANALYTE AND COMPLEXITY OF THE AQUEOUS MATRIX. RECOVERIES ARE REPORTED FOR ABOUT 280 MODEL COMPOUNDS OF A WIDE VARIETY OF CHEMICAL CLASSES AND PHYSICAL PROPERTIES DOSED INTO REPRESENTATIVE SAMPLES OF SEVERAL MAJOR TYPES OF WATER.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012206

PUBLICATION DATE: 83

TITLE: GUIDANCE FOR THE REREGISTRATION OF PESTICIDE PRODUCTS CONTAINING BUTYLATE AS THE ACTIVE INGREDIENT.

DESCRIPTOR: BIBLIOGRAPHIES; *BUTYLATE; *PESTICIDES; *REGISTRATION; *REREGISTRATION; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 101P. PRICE CODE: PC A06/MF A01. ORDER NO.: PB83-147304/WEP

ABSTRACT: THIS DOCUMENT CONTAINS INFORMATION REGARDING REREGISTRATION OF PESTICIDE PRODUCTS CONTAINING THE SUBJECT ACTIVE INGREDIENT. THE DOCUMENT INCLUDES HOW TO REGISTER UNDER A REGISTRATION STANDARD, REGULATORY POSITION AND RATIONALE, AND SUMMARIES OF DATA REQUIREMENTS AND DATA GAPS. ALSO INCLUDED IS A BIBLIOGRAPHY CONTAINING CITATIONS OF ALL STUDIES REVIEWED BY EPA IN ARRIVING AT THE POSITIONS AND CONCLUSIONS CONTAINED IN THE STANDARD.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012207

PUBLICATION DATE: 83

TITLE: DETERMINING THE STABILITY OF TREATED MUNICIPAL SLUDGES.

PERSONAL AUTHOR: JERIS, J. S.; AND OTHERS

DESCRIPTOR: *LABORATORY STUDIES; *LITERATURE REVIEWS; *PERFORMANCE EVALUATION; *SLUDGE; *SLUDGE STABILITY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 205P. PRICE CODE: PC A10/MF A01. ORDER NO.: PB85-147139/WEP

ABSTRACT: THE OBJECTIVE OF THIS PROJECT WAS TO DETERMINE THE POTENTIAL FOR FURTHER BIOLOGICAL DEGRADATION BIOLOGICALLY OF MUNICIPAL SLUDGES WHICH HAVE UNDERGONE EITHER LITTLE OR MAJOR TREATMENT. A LITERATURE SURVEY WAS CONDUCTED TO DETERMINE THE MOST FRUITFUL APPROACHES, FOLLOWED BY LABORATORY SCALE STUDIES. THE LITERATURE SURVEY SUMMARIZES AVAILABLE INFORMATION RELATED TO THE CHARACTERISTICS AND VARIOUS STABILITY PARAMETERS OF MUNICIPAL SLUDGES THAT HAVE UNDERGONE TREATMENT BY ANAEROBIC, AEROBIC OR THERMAL CONDITIOING PROCESSES. THE LABORATORY STUDY BUILT UPON METHODS DESCRIBED IN THE LITERATURE FOR EVALUATING STABILITY OF SLUDGES. STABILITY OF A VARIETY OF RECEIVED SLUDGES WAS EVALUATED BY MEASURING RESPONSE TO ADDITIONAL AEROBIC OR ANAEROBIC DIGESTION OF LONG DURATION, AND BY CUMULATIVE GENERATION OF HYDROGEN SULFIDE. RESPONSES TO AEROBIC DIGESTION OF THE AS-RECEIVED SLUDGES WERE GENERALLY SIMILAR AND SHOWED SUBSTANTIAL REDUCTIONS IN PARAMETERS SUCH AS BOD AND COD.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVIVE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012209

PUBLICATION DATE: 84

TITLE: DRINKING WATER MICROBIOLOGY. NATO/CCMS (COMMITTEE ON THE CHALLENGES OF MODERN SOCIETY) DRINKING WATER PILOT PROJECT SERIES.

PERSONAL AUTHOR: CLIVER, D. O.; AND OTHERS

DESCRIPTOR: ANALYTICAL TECHNIQUES; *DRINKING WATER; *MICROBIOLOGY; *NATO; PATHOGENS, *STANDARDS; TECHNOLOGY; *WATER TREATMENT; *WATER DISTRIBUTION

DESCRIPTIVE NOTE: 608P. PRICE CODE: PC A99/MF A01. ORDER NO.: PB85-144343/WEP

ABSTRACT: THIS DOCUMENT WAS PREPARED BY NATO'S COMMITTEE ON THE CHALLENGES OF MODERN SOCIETY TO EXAMINE ALL ASPECTS OF DRINKING WATER MICROBIOLOGY THAT HAVE PRACTICAL SIGNIFICANCE TO INDUSTRIALIZED NATIONS. OVER 50 EXPERTS FROM 11 COUNTRIES PARTICIPATED IN THE DEVELOPMENT OF THIS REPORT. SEVEN PRINCIPAL AREAS ARE DISCUSSED: (1) THE MICROBIOLOGY OF RAW WATER, (2) MICROBIAL PATHOGENS TRANSMITTED BY WATER, (3) INDICATOR SYSTEMS, (4) TESTING AND STANDARDS, (5) PROCESSES USED IN DRINKING WATER TREATMENT, (6) DISTRIBUTION SYSTEMS, AND (7) TECHNOLOGICAL ASPECTS OF POTABLE WATER MICROBIOLOGY.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012216

PUBLICATION DATE: 85

TITLE: COAL TAR HAZARDS. 1976-FEBRUARY 1985 (CITATIONS FROM THE ENERGY DATA BASE).

DESCRIPTOR: ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *CARCINOGENS; *COAL TAR; *ENVIRONMENTAL HAZARDS; *OCCUPATIONAL HAZARDS; *SURVEYS; *TOXIC SUBSTANCES; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 156P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-853302/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING OCCUPATIONAL AND ENVIRONMENTAL HAZARDS OF COAL TAR. TOPICS INCLUDE EFFLUENT TREATMENT, EMISSION CONTROL TECHNIQUES, AND OCCUPATIONAL SAFETY IN THE COKING AND COAL MINING INDUSTRY. HEALTH HAZARD EVALUATIONS, ENVIRONMENTAL SURVEYS, TECHNOLOGICAL ASSESSMENTS OF INDUSTRIAL PROCESSES, AND RESPIRATORY PROTECTION FACILITIES ARE INCLUDED. CARCINOGENIC HAZARDS OF COAL DUST ARE ALSO DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 159 CITATIONS, 23 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012217

PUBLICATION DATE: 85

TITLE: WATER POLLUTION: UPTAKE OF HEAVY METALS BY SHELLFISH AND MARINE PLANTS. 1974-FEBRUARY 1985 (CITATIONS FROM OCEANIC ABSTRACTS).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; ECOLOGY; *HEAVY METALS; *METALS; FOOD CHAINS; MARINE ENVIRONMENT; *MARINE PLANTS; *SHELLFISH; *WATER POLLUTION

DESCRIPTIVE NOTE: 191P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-855237/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING HEAVY METAL CONTAMINATION OF SHELLFISH AND MARINE PLANTS. TOXICITY LEVELS AND THE LONG TERM EFFECTS ON THE ECOLOGY OF THE MARINE ENVIRONMENT ARE DISCUSSED. THE GROWTH RATE OF MARINE LIFE AS A FUNCTION OF METAL CONCENTRATION AND THE LONG TERM EFFECTS ON THE FOOD CHAIN ARE ALSO CONSIDERED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 256 CITATIONS, 12 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012218

PUBLICATION DATE: 84

TITLE: TOXICOLOGICAL DATA ON SELECTED HAZARDOUS CHEMICALS AND POSSIBLE EXTRAPOLATION TO MAN.

PERSONAL AUTHOR: BULL, R. J.

DESCRIPTOR: *CARCINOGENS; *CHEMICALS; *DRINKING WATER; HAZARDOUS MATERIALS; PUBLIC HEALTH; *RESEARCH REVIEWS; *TOXIC SUBSTANCES; WATER TREATMENT; WATER DISTRIBUTION

DESCRIPTIVE NOTE: 63P. PRICE CODE: PC A04/MF A01. ORDER NO.: PB85-121002/WEP

ABSTRACT: THE EXPERIMENTAL EVIDENCE THAT CHEMICALS COMMONLY FOUND IN DRINKING WATER POSSESS CARCINOGENIC PROPERTIES IS REVIEWED. THREE TYPES OF SOURCES FOR CHEMICALS IN DRINKING WATER ARE EXAMINED; THOSE WHICH ARE CONTAMINANTS OF DRINKING WATER SOURCES, THOSE THAT ARISE AS BY-PRODUCTS OF DRINKING WATER TREATMENT, AND THOSE THAT ARISE IN THE DISTRIBUTION OF DRINKING WATER. THE EVIDENCE FOR CARCINOGENICITY OF CHEMICALS THAT HAS BEEN OBTAINED FROM STUDIES EMPLOYING VEGETABLE OIL GAVAGE FOR CARBON TETRACHLORIDE, DICHLOROETHYLENE, TRICHLOROETHYLENE, TETRACHLOROETHYLENE AND CHLOROFORM IS CRITICALLY EXAMINED. NEW EVIDENCE FOR THE CARCINOGENICITY OF ACRYLAMIDE IS REVIEWED AND COMPARED TO EARLIER EVIDENCE FOR EPICHLOROHYDRIN CARCINOGENICITY. FINALLY, THE RELATIVE CARCINOGENIC ACTIVITY ASSOCIATED WITH COAL TAR- VERSUS ASPHALTIC-BASED PAINTS USED IN WATER STORAGE AND DISTRIBUTION SYSTEMS ARE COMPARED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012219

PUBLICATION DATE: 84

TITLE: SOURCEBOOK: GAINING ACCESS TO U.S. GOVERNMENT INFORMATION ON THE ENVIRONMENT AND NATURAL RESOURCES.

PERSONAL AUTHOR: O'HARA, F. M.; AND O'HARA, L.

DESCRIPTOR: *ENVIRONMENT; *GOVERNMENT PUBLICATIONS; *INFORMATION DISSEMINATION; *INFORMATION SERVICES; *INFORMATION SOURCES; *NATURAL RESOURCES; PUBLICATIONS; SCIENCES; TECHNOLOGY

DESCRIPTIVE NOTE: 127P. PRICE CODE: PC A07/MF A01. ORDER NO.: DE84017419/WEP

ABSTRACT: THIS PUBLICATION IS DESIGNED TO ACQUAINT THE READER WITH THE BROAD RANGE OF SERVICES AND PUBLICATIONS THAT ARE OFFERED BY THE U.S. GOVERNMENT AND THAT PROVIDE INFORMATION ABOUT THE ENVIRONMENT AND NATURAL RESOURCES. THESE SOURCES OF INFORMATION INCLUDE REFERRAL SERVICES, PUBLIC-INFORMATION OFFICES, COMPUTERIZED DATA BANKS, INFORMATION-ANALYSIS CENTERS, AND PUBLICATION-DISTRIBUTION SYSTEMS AS WELL AS PUBLISHED SOURCES LIKE BIBLIOGRAPHIES, ABSTRACT AND INDEX JOURNALS, REPORTS, HANDBOOKS, AND ATLASES. THE SUBJECT MATTER COVERED BY THIS SOURCEBOOK INCLUDES AIR POLLUTION, METEOROLOGY, WATER RESOURCES AND QUALITY, FISHERIES, AQUACULTURE, MARINE SCIENCE, SOLID AND HAZARDOUS WASTE TREATMENT, LAND USE, SOIL SCIENCE, POPULATION AND DEMOGRAPHY, ANTHROPOLOGY, ARCHITECTURE, GEOGRAPHY, URBAN STUDIES, HEALTH, BIOLOGY, AGRICULTURE, FORESTRY, HABITAT, WILDLIFE, GEOLOGY, MINERALS, AND RELATED SCIENCES AND TECHNOLOGIES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012220

PUBLICATION DATE: 85

TITLE: CHROMATOGRAPHY FOR POLLUTION AND TOXICOLOGICAL ANALYSIS. JUNE 1970-JANUARY 1984 (CITATIONS FROM THE ENGINEERING INDEX DATA BASE).

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *AIR POLLUTION; *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *CHROMATOGRAPHY; *LABORATORY PROCEDURES; *WATER POLLUTION

DESCRIPTIVE NOTE: 231P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-854362/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE USE OF CHROMATOGRAPHY IN THE ANALYSIS OF AIR AND WATER POLLUTANTS, WASTES, AND TOXIC MATERIALS. GAS CHROMATOGRAPHY AND HIGH PERFORMANCE LIQUID CHROMATOGRAPHY ARE EMPHASIZED IN THIS BIBLIOGRAPHY. APPLICATIONS AND PERFORMANCE EVALUATIONS OF CHROMATOGRAPHIC ADSORPTION PROCESSES ARE INCLUDED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 329 CITATIONS, NONE OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012221

PUBLICATION DATE: 83

TITLE: 'KLEBSIELLA' OCCURRENCE, SIGNIFICANCE AND DETECTION IN WATER SYSTEMS: A PROGRESS REPORT.

PERSONAL AUTHOR: GELDREICH, E. E.; AND RICE, E. W.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *DRINKING WATER; *COLIFORM BACTERIA; *KLEBSIELLA; *MICROBIOLOGY; *OPERATIONS (WATER); *WATER TREATMENT

DESCRIPTIVE NOTE: 23P. PRICE CODE: PC A02/MF A01. ORDER NO.: PB83-144160/WEP

ABSTRACT: FREQUENT OCCURRENCE OF KLEBSIELLA IN COLIFORM COLONIZATION PROBLEMS FOUND IN WATER SUPPLY DISTRIBUTION HAS PROMPTED THE DEVELOPMENT OF A NEW MEDIUM (M-KLEB AGAR) FOR SPECIFIC DETECTION. THE MEDIUM HAS EXCELLENT DIFFERENTIAL CHARACTERISTICS, AND AN AVERAGE 94% KLEBSIELLA RECOVERY RATE WHEN USED IN THE MEMBRANE FILTER PROCEDURE. THIS MEDIA MAY ALSO BE USED AS A STREAK PLATE TO VERIFY KLEBSIELLA OCCURRENCE IN THE MF VERIFICATION PROCEDURE OR AS A SUPPLEMENTARY TEST IN THE MULTIPLE TUBE CONFIRMATION PROCESS. A PROPOSED ACTION PLAN WITH TWO LEVELS OF RESPONSE TO COLIFORM OCCURRENCES IN PUBLIC WATER SUPPLIES IS DISCUSSED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012222

PUBLICATION DATE: 83

TITLE: CHROMATOGRAPHY FOR POLLUTION AND TOXICOLOGICAL ANALYSIS. FEB 1984-JAN 1983 (CITATIONS FROM THE ENGINEERING INDEX DATA BASE).

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ANNOTATED BIBLIOGRAPHIES; *AIR POLLUTION CONTROL; BIBLIOGRAPHIES; *CHROMATOGRAPHY; *LABORATORY PROCEDURES; *PERFORMANCE EVALUATION; *WASTES; *TOXIC MATERIALS; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 56P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB83-854370/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE USE OF CHROMATOGRAPHY IN THE ANALYSIS OF AIR AND WATER POLLUTANTS, WASTES, AND TOXIC MATERIALS. GAS CHROMATOGRAPHY AND HIGH PERFORMANCE LIQUID CHROMATOGRAPHY ARE EMPHASIZED IN THIS BIBLIOGRAPHY. APPLICATIONS AND PERFORMANCE EVALUATIONS OF CHROMATOGRAPHIC ADSORPTION PROCESSES ARE INCLUDED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 62 CITATIONS, ALL OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012223

PUBLICATION DATE: 85

TITLE: HETEROTROPHIC BACTERIA IN POTABLE WATER: PROGRESS IN METHOD OPTIONS AND MONITORING BENEFITS.

PERSONAL AUTHOR: REASONER, D. J.; AND GELDREICH, E. E.

DESCRIPTOR: *BACTERIA; *BIOLOGICAL INDICATORS; *DRINKING WATER; *INDICATOR ORGANISMS; *MICROBIOLOGY; *OPERATIONS (WATER); *WATER TREATMENT

DESCRIPTIVE NOTE: 15P. PRICE CODE: PC A02/MF A01. ORDER NO.: PB85-144152/WEP

ABSTRACT: MEASUREMENTS OF HETEROTROPHIC BACTERIA IN POTABLE WATER CAN PROVIDE USEFUL INFORMATION TO WATER PLANT OPERATORS AND SANITARY ENGINEERS. BACTERIAL DENSITY CHANGES DURING TREATMENT AND QUALITY DETERIORATION DURING DISTRIBUTION CAN BE MONITORED USING HETEROTROPHIC PLATE COUNT (HPC) METHODS. CONSISTENT APPLICATION OF THE HPC METHOD SELECTED WILL PROVIDE BASELINE DATA FOR ASSESSING BACTERIAL QUALITY CHANGES. DISCUSSION WILL FOCUS ON OPTIMIZING THE MEASUREMENT OF HETEROTROPHIC BACTERIA THROUGH CHOICE OF PROCEDURES, MEDIA AND INCUBATION TIME AND TEMPERATURE.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012224

PUBLICATION DATE: 85

TITLE: EVALUATION OF METHODS TO MEASURE THE ACUTE TOXICITY OF SEWAGE SLUDGE.

PERSONAL AUTHOR: MILLER, D. C.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *OPERATIONS (WASTEWATER); *RESEARCH REPORTS; *SEWAGE SLUDGE; *SLUDGE; *TOXICITY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 77P. PRICE CODE: PC A05/MF A01. ORDER NO.: PB85-144061/WEP

ABSTRACT: RESEARCH WAS UNDERTAKEN TO DETERMINE WHETHER IMPROVEMENTS WERE NEEDED TO INCREASE THE RELIABILITY OF ACUTE TOXICITY METHODOLOGIES FOR MYSID AND JUVENILE ATLANTIC SILVERSIDE WASTE CHARACTERIZATION TESTS FOR MUNICIPAL SEWAGE SLUDGE. THREE NEW ACUTE BIOASSAYS USING MYSIDS, LARVAL FISH AND CALANOID COPEPODS WERE DESIGNED EXPRESSLY TO TEST SEWAGE SLUDGE AND RESULTS USING THESE TESTS WERE COMPARED WITH RESULTS FROM TESTS PRESENTLY USED TO REGULATE OCEAN DUMPING OF SEWAGE SLUDGES. SIMILAR RESULTS WERE OBTAINED IN AN INTERLABORATORY COMPARISON OF METHODS USING THE SAME SLUDGE

SAMPLES FROM THREE WASTEWATER TREATMENT PLANTS. IT IS CONCLUDED THAT THE PRESENT, EASIER TO CONDUCT METHODS MAY BE SATISFACTORY TO CHARACTERIZE ACUTE TOXICITY OF SLUDGE.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW912225

PUBLICATION DATE: 84

TITLE: FEASIBILITY STUDY OF ALTERNATIVE TECHNOLOGY FOR SMALL COMMUNITY WATER SUPPLY.

PERSONAL AUTHOR: MACNEILL, J. S.; AND MACNEILL, A.

DESCRIPTOR: *ALTERNATIVE TECHNOLOGY; *DRINKING WATER; COSTS; NEW YORK; OPERATIONS (WATER); *PERFORMANCE EVALUATION; *RURAL AREAS; TECHNOLOGY; *WATER SUPPLY; *WATER TREATMENT

DESCRIPTIVE NOTE: 128P. PRICE CODE: PC A07/MF A01. ORDER NO.: PB85-143287/WEP

ABSTRACT: A COOPERATIVE DEMONSTRATION PROJECT WAS FUNDED BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) TO ENABLE THE VILLAGE OF CAYUGA, N.Y. TO INSTALL AND DEMONSTRATE WATER FILTRATION TECHNOLOGY THAT MAY BE APPROPRIATE FOR SMALL WATER SYSTEMS THAT USE SURFACE WATER SOURCES. A PREFABRICATED FILTRATION SYSTEM CONSISTING OF TWO CYCLONE SEPARATORS IN PARALLEL FOLLOWED BY THREE PARALLEL TREATMENT TRAINS, EACH EMPLOYING A CONTACT CLARIFIER, A MIXED MEDIA FILTER, AND A GRANULAR ACTIVATED CARBON FILTER WAS INSTALLED AT CAYUGA'S EXISTING WATER TREATMENT PLANT. THE NEW EQUIPMENT REPLACED FACILITIES BUILT IN THE 1930'S. AFTER INSTALLATION, CAREFUL RECORDS OF THE FIRST YEAR'S OPERATION WERE KEPT TO DOCUMENT WATER QUALITY, OPERATING LABOR NEEDS, AND OPERATING COSTS, INCLUDING POWER AND CHEMICALS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW912226

TITLE: CHEMICAL ANALYSIS TECHNIQUES OF TRACE ELEMENTS. JUNE 1981-JANUARY 1984 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *CHEMICAL ANALYSIS; *CHEMICALS; *LABORATORY PROCEDURES; *POLLUTION; *TRACE ELEMENTS

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING TECHNIQUES AND EQUIPMENT USED IN THE ANALYSIS OF TRACE ELEMENTS AND VARIOUS COMPOUNDS OCCURRING IN TRACE AMOUNTS. POLAROGRAPHY, SPECTROSCOPY, GAS CHROMATOGRAPHY, ION EXCHANGING, SEPARATION, EXTRACTION, DISTILLATION, X-RAY FLUORESCENCE ANALYSIS, AND NEUTRON ACTIVATION ANALYSIS ARE AMONG THE METHODS DISCUSSED. CONSIDERABLE ATTENTION IS GIVEN TO POLLUTION DETECTION METHODS. (THIS UPDATED BIBLIOGRAPHY

CONTAINS 286 CITATIONS, NONE OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012227

PUBLICATION DATE: 85

TITLE: CHEMICAL ANALYSIS TECHNIQUES OF TRACE ELEMENTS. FEBRUARY 1984-JANUARY 1985 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *AIR POLLUTION; *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *CHEMICALS; *EQUIPMENT; *CHEMICAL ANALYSIS; *LABORATORY PROCEDURES; *POLLUTION; *SOIL POLLUTION; *TRACE ELEMENTS; *WATER POLLUTION

DESCRIPTIVE NOTE: 75P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-854511/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING METHODS AND EQUIPMENT USED IN THE CHEMICAL ANALYSIS OF TRACE ELEMENTS AND COMPOUNDS OCCURRING IN TRACE AMOUNTS. ELECTRON MICROSCOPY, NEUTRON ACTIVATION ANALYSIS, SPECTROSCOPIC TECHNIQUES, DIFFRACTION, AND FLUORESCENCE ARE AMONG THE ANALYTICAL METHODS CONSIDERED. BIOLOGICAL TISSUE, AND AIR, SOIL, AND WATER POLLUTANTS ARE DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 69 CITATIONS, ALL OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012228

PUBLICATION DATE: 85

TITLE: TOXICITY OF PESTICIDES. 1982-JANUARY 1985 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *ENVIRONMENT; *PESTICIDES; *REGULATIONS; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 247P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-854537/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING OCCUPATIONAL SURVEYS, CLINICAL INVESTIGATIONS, AND LABORATORY ANALYSIS PERTAINING TO THE TOXIC EFFECTS OF PESTICIDES. TOPICS INCLUDE TERRESTRIAL AND AQUATIC ECOSYSTEM RESPONSES, REGULATORY ASPECTS, TRANSPORT AND METABOLISM, AND REGISTRATION STANDARDS AND PROCEDURES. THE DETECTION OF SPECIFIC COMPOUNDS AND THEIR EFFECTS ON SELECTED SPECIES ARE ALSO DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 296 CITATIONS, 179 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012229

TITLE: VINYL CHLORIDE AND POLYVINYL CHLORIDE: TOXICOLOGY. 1978-1984 (CITATIONS FROM THE LIFE SCIENCES COLLECTION DATA BASE).

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *CHEMICALS; *POLYVINYL CHLORIDE; *RESEARCH REPORTS; *TOXICOLOGY; *TOXIC SUBSTANCES; *VINYL CHLORIDE

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE TOXICITY OF VINYL CHLORIDE AND POLYVINYL CHLORIDE FOLLOWING SHORT AND LONG TERM EXPOSURES. METABOLISM, CARCINOGENICITY, AND TERATOGENITIC POTENTIAL OF THESE SUBSTANCES ARE CONSIDERED. METHODOLOGY TO QUANTITATE THEIR PRESENCE IN ATMOSPHERIC DUST AND BODY TISSUES ARE DISCUSSED. OCCUPATIONAL HAZARDS ARE ALSO NOTED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 22[illegible] CITATIONS, 22 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE; 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012230

PUBLICATION DATE: 84

TITLE: STRIP MINING: HYDROLOGY. 1977-1984 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES. BIBLIOGRAPHIES; *HYDROLOGY; *MINING; *MONITORING; *SITE REHABILITATION; *STRIP MINING; *WATER QUALITY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 244P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-853018/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE HYDROLOGIC IMPACTS OF STRIP MINING. THE POTENTIAL IMPACTS OF STRIP MINING ON SURFACE AND GROUND WATER AND MEASURES TO MONITOR AND CONTROL WATER POLLUTION ARE DISCUSSED. SITE REHABILITATION IS ALSO CONSIDERED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 226 CITATIONS, 22 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012232

PUBLICATION DATE: 84

TITLE: OCEAN DISPOSAL SYSTEMS FOR SEWAGE SLUDGE AND EFFLUENT.

DESCRIPTOR: *OCEAN DISPOSAL; *OCEANS; *EFFLUENT; *SEWAGE; *SLUDGE; *WASTE DISPOSAL; *WASTEWATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 137P. PRICE CODE: PC A07/MF A01. ORDER NO.: PB85-136422/WEP

ABSTRACT: FOR COASTAL CITIES, THE OCEAN DISPOSAL OPTION FOR MUNICIPAL WASTE WATER AND SLUDGE IS OFTEN ATTRACTIVE, PROVIDED WATER QUALITY IS MAINTAINED AT ACCEPTABLE STANDARDS. THERE ARE A VARIETY OF METHODS TO DISPOSE OF SEWAGE AND SLUDGE IN THE OCEAN (E.G., SUBMARINE PIPELINES AND SURFACE VESSELS FOR DUMPING) AND A CHOICE OF LOCATIONS, DISTANCE FROM SHORE, AND DIFFUSERS TO ENHANCE INITIAL MIXING. THE PURPOSE OF THIS REPORT IS TO EXPLAIN HOW OCEAN DISPOSAL CAN BE DESIGNED AS AN ENGINEERING SYSTEM TO MEET WATER QUALITY REQUIREMENTS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012233

PUBLICATION DATE: 84

TITLE: METALS RECOVERY FROM WASTES. 1977-1984 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *INDUSTRIAL WASTES; *METALS; *METAL RECOVERY; *RECYCLING; *WASTES; *WASTEWATER

DESCRIPTIVE NOTE: 203P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-853083/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE RECOVERY AND RECYCLING OR REUSE OF FERROUS AND NONFERROUS METALS FROM VARIOUS INDUSTRIAL WASTES, ESPECIALLY WASTE WATERS. (THIS UPDATED BIBLIOGRAPHY CONTAINS 204 CITATIONS, 11 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012234

PUBLICATION DATE: 84

TITLE: DREDGING: TECHNOLOGY AND ENVIRONMENTAL ASPECTS. 1978-1984 (CITATIONS FROM THE LIFE SCIENCES COLLECTION DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *DREDGING; *ENVIRONMENTAL EFFECTS; *EQUIPMENT; *TECHNOLOGY; *WATER QUALITY

DESCRIPTIVE NOTE: 191P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-853067/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE TECHNOLOGY AND ENVIRONMENTAL IMPACTS OF DREDGING. EQUIPMENT, INCLUDING SEMI-SUBMERSIBLE CUTTER PLATFORMS. SEDIMENT MOVEMENT, FACTORS AFFECTING SEDIMENT MOVEMENT, AND THE DISPOSAL OF DREDGED MATERIAL, ARE DISCUSSED, AND COMPUTER MODELS PREDICTING THE FATE OF THE DREDGED MATERIALS ARE CONSIDERED. THE ENVIRONMENTAL IMPACTS OF THE DREDGED AREAS AND THE EFFECTS OF OCEAN DUMPING OF DREDGED MATERIAL ARE ALSO DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 236 CITATIONS, 12 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012236

PUBLICATION DATE: 84

TITLE: BENZENE TOXICITY. 1978-1984 (CITATIONS FROM THE LIFE SCIENCES COLLECTION DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BENZENE; BIBLIOGRAPHIES; *ANALYTICAL TECHNIQUES; *RESEARCH REPORTS; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 132P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-852713/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING TOXICITY OF BENZENE FOLLOWING SHORT AND LONG TERM EXPOSURE. THE METABOLISM, CARCINOGENICITY, AND TERATOGENITIC POTENTIAL OF BENZENE ARE CONSIDERED AND METHODOLOGY TO QUANTITATE ITS PRESENCE IN THE ATMOSPHERE, BODY TISSUES, AND BODY FLUIDS ARE DISCUSSED. OCCUPATIONAL HAZARDS OF BENZENE ARE NOTED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 199 CITATIONS, 22 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012237

PUBLICATION DATE: 84

TITLE: FRESH WATER MUSSELS AND WATER QUALITY. 1977-1984 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *BIOLOGICAL INDICATORS; *ENVIRONMENTAL EFFECTS; *MOLLUSCS; *MUSSELS; *RESEARCH REPORTS; *WATER QUALITY

DESCRIPTIVE NOTE: 127P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-852275/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE USE OF MOLLUSCS TO MONITOR WATER QUALITY, AND THE EFFECTS OF WATER QUALITY UPON THE DISTRIBUTION AND ABUNDANCE OF MOLLUSCS. MOLLUSCS INCLUDE MUSSELS, CLAMS, AND OTHER

BIVALVES. WATER QUALITY IS AFFECTED BY SEDIMENTATION, EUTROPHICATION, HEAVY METALS, PESTICIDES, AND OTHER TOXICANTS. THE STUDIES INCLUDE BOTH THE INVESTIGATION OF EFFECTS AND THE SPECIFIC REPORTS FOR IDENTIFIED RIVERS, LAKES AND IMPOUNDMENTS. (THIS UPDATED BIBLIOGRAPHY CONTAINS 121 CITATIONS, 45 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012238

PUBLICATION DATE: 84

TITLE: ION EXCHANGE RESINS. JUNE, 1970-SEPTEMPER, 1983 (CITATIONS FROM THE ENGINEERING INDEX DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *ION EXCHANGE; *RESINS; *WATER TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 266P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-852291/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE PREPARATION, PROPERTIES, AND APPLICATIONS OF ION EXCHANGE RESINS. APPLICATIONS INCLUDE WATER AND WASTE TREATMENT; CHEMICAL RECOVERY, SEPARATION, PURIFICATION, AND CATALYSIS; DESALINATION; AND ORE TREATMENT AND RECOVERY. REGENERATION AND DISPOSAL OF ION EXCHANGE RESINS ARE ALSO COVERED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 353 CITATIONS, NONE OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012239

PUBLICATION DATE: 84

TITLE: ION EXCHANGE RESINS. OCTOBER, 1983-NOVEMBER, 1984 (CITATIONS FROM THE ENGINEERING INDEX DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; CHEMICALS; BIBLIOGRAPHIES; DESALINATION; *ION EXCHANGE; *RESINS; *WASTE TREATMENT; *WATER TREATMENT

DESCRIPTIVE NOTE: 67P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-852309/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE PREPARATION, PROPERTIES, AND APPLICATIONS OF ION EXCHANGE RESINS. APPLICATIONS INCLUDE WATER AND WASTE TREATMENT; CHEMICAL RECOVERY, SEPARATION, PURIFICATION, AND CATALYSIS; DESALINATION; AND ORE TREATMENT AND RECOVERY. REGENERATION AND DISPOSAL OF ION EXCHANGE RESINS ARE ALSO COVERED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 80 CITATIONS, ALL OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285

PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012240

PUBLICATION DATE: 84

TITLE: OIL SPILL REMOVAL: DISPERSANTS, ABSORBANTS, BOOMS, AND SKIMMERS. 1973-1984 (CITATIONS FROM THE LIFE SCIENCES COLLECTION DATA BASE

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *CHEMICALS; *EQUIPMENT; *ENVIRONMENTAL EFFECTS; *OIL; *OIL SPILLS; *WATER QUALITY

DESCRIPTIVE NOTE: 107P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-852332/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE TECHNIQUES AVAILABLE FOR THE REMOVAL OF OIL FOLLOWING MAJOR SPILLS. CHEMICAL DISPERSANTS, GELLING AGENTS, FOAM PLASTICS, BOOMS, SKIMMERS, AND BURNING ARE DISCUSSED. SPECIFIC OIL SPILLS ARE CONSIDERED AND THE ENVIRONMENTAL IMPACTS OF OIL SPILLS ARE NOTED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 126 CITATIONS, 14 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012241

PUBLICATION DATE: 84

TITLE: FRESH WATER MUSSELS AND WATER QUALITY. 1970-NOVEMBER, 1984 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *MOLLUSCS; *MUSSELS; MONITORING; *RESEARCH REPORTS; *WATER QUALITY

DESCRIPTIVE NOTE: 101P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-852549/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE USE OF MOLLUSCS TO MONITOR WATER QUALITY, AND THE EFFECTS OF WATER QUALITY UPON THE DISTRIBUTION AND ABUNDANCE OF MOLLUSCS. MOLLUSCS INCLUDE MUSSELS, CLAMS, AND OTHER BIVALVES. WATER QUALITY IS AFFECTED BY SEDIMENTATION, EUTROPHICATION, HEAVY METALS, PESTICIDES, AND OTHER TOXICANTS. THE STUDIES INCLUDE BOTH THE INVESTIGATION OF EFFECTS AND THE SPECIFIC REPORTS FOR IDENTIFIED RIVERS, LAKES AND IMPOUNDMENTS. (THIS UPDATED BIBLIOGRAPHY CONTAINS 98 CITATIONS, 19 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012242

PUBLICATION DATE: 84

TITLE: FORMALDEHYDE. JUNE, 1970-1984 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *ANALYTICAL TECHNIQUES; BIBLIOGRAPHIES; *FORMALDEHYDE; *HEALTH HAZARDS; INDUSTRY; *RESEARCH REPORTS; SAMPLING; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 243P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-852366/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE HEALTH HAZARDS OF FORMALDEHYDE INHALATION. HEALTH HAZARD EVALUATION REPORTS OF INDUSTRIAL SITES ARE DISCUSSED AND THE EFFECTS OF FORMALDEHYDE ON ANIMALS AND HUMANS ARE CONSIDERED. INDUSTRIAL HYGIENE SAMPLING METHODS AND ANALYTICAL METHODS TO QUANTITATE FORMALDEHYDE ARE ALSO DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 231 CITATIONS, 20 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012243

PUBLICATION DATE: 84

TITLE: DISINFECTANTS: CHLORINE AND CHLORINE DIOXIDE. 1978-1984 (CITATIONS FROM THE LIFE SCIENCES COLLECTION DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *CHLORINE; *CHLORINE DIOXIDE; *DISINFECTANTS; *WATER TREATMENT; *WASTEWATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 149P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-852747/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE ANTIMICROBIAL PROPERTIES OF CHLORINE AND CHLORINE DIOXIDE. THE USE OF CHLORINE FOR THE INACTIVATION OF VIRUSES, BACTERIA AND FUNGI IN WASTEWATER TREATMENT PLANTS IS DISCUSSED, INCLUDING THE MODE OF ACTION AND FACTORS INFLUENCING INACTIVATION. THE USE OF CHLORINE DIOXIDE AS AN ALTERNATIVE TO CHLORINE DISINFECTION IN WATER SUPPLIES AND SWIMMING POOLS IS ALSO DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 120 CITATIONS, 16 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012245

PUBLICATION DATE: 84

TITLE: WATERBORNE DISEASE OUTBREAKS IN INDIVIDUAL WATER SYSTEMS IN THE UNITED STATES, 1920-80.

PERSONAL AUTHOR: CRAUN, G. F.; AND OTHERS

DESCRIPTOR: BACTERIA; *DRINKING WATER; *DISEASES; HEALTH; *PUBLIC HEALTH; *WATERBORNE DISEASES; *WATER TREATMENT; *WELL WATER; *WATER QUALITY

DESCRIPTIVE NOTE: 23P. PRICE CODE: PC A03/MF A01. ORDER NO.: PB85-128171/WEP

ABSTRACT: AN ANALYSIS OF THE ETIOLOGIES AND CAUSES OF 302 WATERBORNE OUTBREAKS OCCURRING IN INDIVIDUAL WATER SYSTEMS DURING 1920-80 SHOWED STREPTOCOCCUS TYPHI TO BE THE MOST COMMONLY IDENTIFIED PATHOGEN AND USE OF CONTAMINATED, UNTREATED WELL WATER THE MAJOR CAUSE OF THESE OUTBREAKS. THESE OUTBREAKS RESULTED IN 6701 ILLNESSES AND 224 DEATHS AND OCCURRED PRIMARILY DURING JUNE, JULY, AUGUST, AND SEPTEMBER.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012246

PUBLICATION DATE: 84

TITLE: STANDARD ANALYTICAL PROCEDURES OF THE NOAA (NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION) NATIONAL ANALYTICAL FACILITY, 1984-85.

PERSONAL AUTHOR: MACLEOD, W. D.; AND OTHERS

DESCRIPTOR: *AQUATIC ENVIRONMENT; *ANALYTICAL PROCEDURES; *CHEMICALS; *ENVIRONMENT; *HEALTH; *LABORATORY PROCEDURES; *ORGANIC COMPOUNDS; *STANDARDS; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 102P. PRICE CODE: PC A06/MF A01. ORDER NO.: PB85-126282/WEP

ABSTRACT: NUMEROUS RECENT STUDIES DEMONSTRATE ASSOCIATIONS BETWEEN ORGANIC CHEMICAL CONTAMINATION OF THE AQUATIC ENVIRONMENT AND IMPACTS ON ENVIRONMENTAL HEALTH AND, POTENTIALLY, ON HUMAN HEALTH (CF. MALINS ET AL. 1984). IF THE RESULTS OF ONE STUDY ARE TO BE COMPARED WITH THOSE OF ANOTHER, UNIFORM ANALYTICAL METHODS FOR THE CHEMICALS WILL BE REQUIRED. TO MEET THIS NEED, NOAA'S NATIONAL ANALYTICAL FACILITY (NAF) PREPARED THIS TECHNICAL MEMORANDUM AS A METHODS MANUAL FOR EXTRACTABLE ORGANIC CHEMICALS IN MARINE SEDIMENTS AND TISSUES. IT APPLIES SPECIFICALLY TO THE ORGANIC ANALYTES (I.E., CHEMICALS TO BE ANALYZED FOR) SELECTED FOR DOCUMENTATION BY NOAA'S NATIONAL STATUS AND TRENDS (S&T) PROGRAM.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012247

PUBLICATION DATE: 83

TITLE: NATIONWIDE URBAN RUNOFF PROGRAM, WASHINGTON, D.C. AREA URBAN RUNOFF PROJECT: FINAL REPORT.

DESCRIPTOR: *BEST MANAGEMENT PRACTICES; COSTS; FACILITIES; MANAGEMENT; *NATIONWIDE URBAN RUNOFF PROGRAM; *WASHINGTON, D.C.; *RESEARCH REPORTS; *URBAN AREAS; *SURFACE RUNOFF; *STORMWATER; WATER QUALITY; *WATER POLLUTION CONTROL; WATERSHEDS

DESCRIPTIVE NOTE: 199P. PRICE CODE: PC A09/MF A01. ORDER NO.: PB85-122133/WEP

ABSTRACT: THIS REPORT SUMMARIZED THE PRINCIPAL FINDINGS AND CONCLUSIONS DERIVED FROM THE FOLLOWING FIVE MAJOR RESEARCH AREAS: (1) IDENTIFYING THE PRINCIPAL WATER QUANTITY AND WATER QUALITY IMPACTS OF URBAN STORMWATER RUNOFF WITHIN THE D.C. METROPOLITAN AREA; (2) EVALUATING THE POLLUTANT REMOVAL CAPABILITY OF VARIOUS URBAN BEST MANAGEMENT PRACTICES (BMPS) CURRENTLY IN USE WITHIN THE REGION; (3) DEVELOPING A PREDICTIVE METHODOLOGY FOR ESTIMATING THE COSTS OF BUILDING AND MAINTAINING STORMWATER PONDS SO THAT THE COMPARATIVE COSTS OF VARIOUS KINDS OF STORMWATER PONDS COULD BE EVALUATED; (4) EXAMINING THE IMPORTANCE OF ATMOSPHERIC DEPOSITION AS A SOURCE OF POLLUTANTS WHICH CAN BE EVENTUALLY DELIVERED IN URBAN RUNOFF; AND (5) DEVELOPING AND APPLYING SOPHISTICATED WATERSHED MODELING TOOLS TO INTEGRATE NURP RESEARCH INTO A COHERENT FRAMEWORK, SO AS TO IDENTIFY COST-EFFECTIVE RUNOFF MANAGEMENT STRATEGIES IN DEVELOPING WATERSHEDS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012248

TITLE: PROCEEDINGS OF THE THIRD BIENNIAL SYNFUELS WASTEWATER WORKSHOP.

PERSONAL AUTHOR: KING, C. J.

DESCRIPTOR: *CONFERENCE PROCEEDINGS; *INDUSTRY; *INDUSTRIAL WASTES; *RESEARCH; *RESEARCH NEEDS; *SYNFUELS; *WASTEWATER; *WASTEWATER TREATMENT; *WATER POLLUTION CONTROL

ABSTRACT: THE THIRD BIENNIAL SYNFUELS WASTEWATER WORKSHOP, SPONSORED BY THE US DEPARTMENT OF ENERGY, MORGANTOWN ENERGY TECHNOLOGY CENTER, HAS CONTRIBUTED VALUABLE INFORMATION TO THE TECHNICAL DATA BASE ON POLLUTION CONTROL OPTIONS FOR THE TREATMENT OF WASTEWATERS FROM SYNFUEL FACILITIES. THE SIGNIFICANT FINDING OF THIS RECENT WORKSHOP IS ENCOURAGING IN THAT THE CONSENSUS OF OPINION WAS THAT SUFFICIENT INFORMATION IS NOW AVAILABLE TO DESIGN AND CONSTRUCT A COMMERCIAL-SCALE FACILITY, ALBEIT CONSERVATIVELY, WHICH CAN ADEQUATELY TREAT SYNFUEL WASTEWATERS. IT WAS AGREED HOWEVER THAT SOME UNCERTAINTIES STILL EXIST WITH RESPECT TO WASTEWATER CHARACTERIZATION AND THE PERFORMANCE OF VARIOUS WASTEWATER TREATMENT PROCESSES WHICH COULD BE RESOLVED BY FURTHER TESTS AT THE PILOT-SCALE LEVEL. IT IS HOPED THAT THE

FINDINGS OF THIS WORKSHOP WILL PROVIDE GUIDANCE FOR FUTURE SYNFUELS WASTEWATER RESEARCH ACTIVITIES. AREAS WHICH WERE HIGHLIGHTED FOR CONTINUED RESEARCH INCLUDE THE INVESTIGATION OF INNOVATIVE WASTEWATER TREATMENT METHODS (BOTH PHYSICOCHEMICAL AND BIOLOGICAL) WHICH CAN SIGNIFICANTLY REDUCE PROCESSING COSTS OVER CONVENTIONAL TREATMENT SCHEMES; INVESTIGATION OF THE EFFECTS OF STREAM AND SAMPLE RELIABILITY AND REPRESENTATIVENESS ON CONCEPTUAL DESIGN STUDIES AND PILOT PLANT OPERATIONS; MORE DETAILED CHARACTERIZATION OF ORGANIC COMPOUNDS IN SYNFUEL CONDENSATES; AND THE DETERMINATION OF POTENTIAL HEALTH AND ECOLOGICAL EFFECTS OF REFRACTORY CONSTITUENTS IN SYNFUEL WASTEWATERS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012249

PUBLICATION DATE: 84

TITLE: PROTECTING THE NATION'S GROUNDWATER FROM CONTAMINATION. VOLUME 1.

DESCRIPTOR: *CONTAMINATION; *GROUNDWATER; *PLANNING; *POLICIES; *WATER QUALITY; *WATER RESOURCES

DESCRIPTIVE NOTE: 245P. PRICE CODE: PC A11/MF A01. ORDER NO.: PB85-154291/WEP

ABSTRACT: THE OBJECTIVE OF THE OTA STUDY IS TO ASSESS THE CURRENT STATUS OF THE NATION'S KNOWLEDGE AND EXPERIENCE IN DEALING WITH GROUNDWATER CONTAMINATION PROBLEMS. THE STUDY FOCUSES ON EXISTING CONTAMINATION PROBLEMS, WHILE RECOGNIZING THAT THE PREVENTION OF FUTURE CONTAMINATION WOULD ALSO NEED TO BE EXPLICITLY CONSIDERED IN ORDER TO DEVELOP A POLICY FRAMEWORK FOR COMPREHENSIVE RESOURCE PROTECTION; FOR EXAMPLE, AS EXPERIENCE WITH HAZARDOUS WASTES HAS SHOWN THE COST TO CLEAN UP CONTAMINATION CAN BE ENORMOUSLY GREATER THAN THE COST TO PREVENT CONTAMINATION. THUS, THE STRUCTURE OF THE STUDY EVOLVED AROUND THE CONCEPT OF PROTECTING GROUNDWATER QUALITY, COMPRISED OF ACTIVITIES TO DETECT, CORRECT AND PREVENT GROUNDWATER CONTAMINATION.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012250

PUBLICATION DATE: 85

TITLE: PULP BLEACHING WITH OXYGEN AND OZONE. 1976-FEBRUARY 1985 (CITATIONS FROM THE PAPER AND BOARD, PRINTING, AND PACKAGING INDUSTRIES R

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *BLEACH: INDUSTRY; *OXYGEN; *OZONE; *PAPER INDUSTRY; *PULP INDUSTRY; *WATER QUALITY

DESCRIPTIVE NOTE: 120P. PRICE CODE: PC N01/MF N01. ORDER

NO.: PB85-855740/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE PROCESSES, ADVANTAGES, AND APPLICATIONS OF OXYGEN AND OZONE BLEACHING FOR PULPS OF VARIOUS TYPES. THE BASIC CHARACTERISTICS OF OXYGEN BLEACHING ARE CONSIDERED, ALONG WITH MENTION OF THE REDUCED POLLUTION LOAD WHICH CAN RESULT FROM ITS USE. THE TYPES OF PULPS BLEACHED USING THIS PROCESS INCLUDE POLYSULFIDE, SULFITE, AND SULFATE PULPS. (THIS UPDATED BIBLIOGRAPHY CONTAINS 157 CITATIONS, 25 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012251

PUBLICATION DATE: 84

TITLE: USER'S GUIDE FOR WASTOX, A FRAMEWORK FOR MODELING THE FATE OF TOXIC CHEMICALS IN AQUATIC ENVIRONMENTS. PART 1. EXPOSURE CONCENTRA

PERSONAL AUTHOR: CONNOLLY, J. P., AND WINFIELD, R. P.

DESCRIPTOR: *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *CHEMICALS; *AQUATIC ENVIRONMENTS; *GUIDES; *MODELS; *TOXIC SUBSTANCES; *WASTOX

DESCRIPTIVE NOTE: 138P. PRICE CODE: PC A07/MF A01. ORDER NO.: PB85-152882/WEP

ABSTRACT: A COMPUTER PROGRAM, WASTOX, IS DESCRIBED AS A TECHNIQUE FOR MODELING THE FATE OF TOXIC CHEMICALS DISCHARGED INTO NATURAL WATER SYSTEMS. WASTOX IS A BATCH-ORIENTED PROGRAM THAT SOLVES THE MASS BALANCE EQUATIONS TO DEFINE FATE OF TOXIC CHEMICALS IN AQUATIC ENVIRONMENTS. THE REPORT DOCUMENTS THE EXPOSURE CONCENTRATION COMPONENT OF THE PROGRAM, WHICH ANALYZES THE TIME-VARIABLE OR STEADY-STATE, PHYSICAL-CHEMICAL BEHAVIOR OF CHEMICALS. THE MODEL IS GENERALLY APPLICABLE TO ALL TYPES OF WATER BODIES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012252

PUBLICATION DATE: 84

TITLE: PROTECTING THE NATION'S GROUNDWATER FROM CONTAMINATION. VOLUME 2.

DESCRIPTOR: *CONTAMINATION; *GROUNDWATER; *PLANNING; *POLICIES; *WATER QUALITY; *WATER RESOURCES

DESCRIPTIVE NOTE: 271P. PRICE CODE: PC A12/MF A01. ORDER NO.: PB85-154219/WEP

ABSTRACT: THE OBJECTIVE OF THE OTA STUDY IS TO ASSESS THE CURRENT STATUS OF THE NATION'S KNOWLEDGE AND EXPERIENCE IN

DEALING WITH GROUNDWATER CONTAMINATION PROBLEMS. THE STUDY FOCUSES ON EXISTING CONTAMINATION PROBLEMS, WHILE RECOGNIZING THAT THE PREVENTION OF FUTURE CONTAMINATION WOULD ALSO NEED TO BE EXPLICITLY CONSIDERED IN ORDER TO DEVELOP A POLICY FRAMEWORK FOR COMPREHENSIVE RESOURCE PROTECTION; FOR EXAMPLE, AS EXPERIENCE WITH HAZARDOUS WASTES HAS SHOWN THE COST TO CLEAN UP CONTAMINATION CAN BE ENORMOUSLY GREATER THAN THE COST TO PREVENT CONTAMINATION.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012253

PUBLICATION DATE: 85

TITLE: WATERBORNE HUMAN DISEASES. 1977-FEBRUARY 1985 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ANNOTATED BIBLIOGRAPHIES; *BACTERIA; BIBLIOGRAPHIES; *DISEASE; *DISEASE CONTROL; HUMAN DISEASES; *POLLUTION; *PERFORMANCE EVALUATION; *WATER QUALITY; *WATER TREATMENT

DESCRIPTIVE NOTE: 200P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-855939/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING VIROLOGIC ASPECTS OF WATER QUALITY AND POLLUTANTS IN WATERS RELATIVE TO HUMAN DISEASES. THE TECHNIQUES OF BACTERIAL ANALYSIS, BACTERIAL TESTING, AND POLLUTANT IDENTIFICATION IN WATERS ARE DISCUSSED. WATER QUALITY IMPROVEMENT AND DISEASE CONTROL MEASURES IN DOMESTIC WATER USES ARE INCLUDED. ASSESSMENT AND PERFORMANCE EVALUATIONS OF CHEMICAL, PHYSICAL, AND BIOLOGICAL WATER TREATMENTS ARE CONSIDERED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 197 CITATIONS, 10 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012255

PUBLICATION DATE: 84

TITLE: DEVELOPMENT DOCUMENT FOR EFFLUENT LIMITATIONS GUIDELINES, NEW SOURCE PERFORMANCE STANDARDS AND PRETREATMENT STANDARDS FOR THE INORG

DESCRIPTOR: *CHEMICALS; *EFFLUENTS; *EFFLUENT LIMITATIONS; GUIDELINES; INORGANIC CHEMICALS; *POINT SOURCE POLLUTION; *PERFORMANCE STANDARDS; *PRETREATMENT; *STANDARDS; REGULATIONS; *TECHNOLOGY; *WASTEWATER TREATMENT; *USEPA

DESCRIPTIVE NOTE: 607P. PRICE CODE: PC A99/MF A01. ORDER NO.: PB85-136446/WEP

ABSTRACT: THE DEVELOPMENT DOCUMENT DESCRIBES THE TECHNICAL RATIONALE FOR THE DEVELOPMENT OF REGULATIONS LIMITING

DISCHARGES OF POLLUTANTS INTO NAVIGABLE WATERS AND INTO PUBLICLY OWNED TREATMENT WORKS BY EXISTING AND POTENTIAL NEW SOURCES THAT MANUFACTURE CERTAIN INORGANIC CHEMICALS. THE TECHNOLOGICAL BASIS FOR EFFLUENT LIMITATIONS GUIDELINES BASED ON 'BEST PRACTABLE TECHNOLOGY', 'BEST AVAILABLE TECHNOLOGY', 'BEST CONVENTIONAL TECHNOLOGY', AND NEW SOURCE PERFORMANCE STANDARDS AND PRETREATMENT STANDARDS FOR NEW AND EXISTING SOURCES ARE DESCRIBED IN DETAIL.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012256

PUBLICATION DATE: 85

TITLE: SEDIMENT - WATER INTERACTIONS AND THEIR EFFECTS UPON WATER QUALITY. 1979-MARCH 1985 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *CONTAMINANTS; *RESEARCH REPORTS; *SEDIMENTS; *WATER QUALITY

DESCRIPTIVE NOTE: 111P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-856045/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING CONTAMINANT TRANSPORT AND FATE IN HYDRAULIC SYSTEMS CONTAINING SEDIMENTS. TOPICS INCLUDE NUTRIENT RECYCLING, ABSORPTION AND DESORPTION OF A VARIETY OF CONTAMINANTS, ION EXCHANGE PROCESSES, AND THE UTILIZATION OF TRANSPORT MODELS IN CONTAMINATION STUDIES. CITATIONS PERTAINING SPECIFICALLY TO MARINE ENVIRONMENTS ARE EXCLUDED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 104 CITATIONS, 26 OF WHICH AER NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012257

PUBLICATION DATE: 83

TITLE: LABORATORY MANUAL FOR THE DETERMINATION OF METALS IN WATER AND WASTEWATER BY ATOMIC ABSORPTION SPECTROPHOTOMETRY.

PERSONAL AUTHOR: SMITH, R.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ATOMIC ABSORPTION SPECTROPHOTOMETRY; *LABORATORY PROCEDURES; *METALS; *SPECTROPHOTOMETRY; *WATER; *WASTEWATER

DESCRIPTIVE NOTE: 35P. PRICE CODE: PC A03/MF A01. ORDER NO.: DE84702322/WEP

STRACT: THIS GUIDE PRESENTS, IN ADDITION TO A BRIEF SCUSSION OF THE BASIC PRINCIPLES AND PRACTICAL ASPECTS OF TOMIC ABSORPTION SPECTROPHOTOMETRY, A SCHEME OF ANALYSIS FOR THE DETERMINATION OF 19 METALS IN WATER AND WASTEWATER, 16 BY FLAME ATOMIC ABSORPTION AND 3 BY VAPOUR GENERATION

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TECHNIQUES. SIMPLICITY, SPEED AND ACCURACY WERE THE MAIN CRITERIA CONSIDERED IN THE SELECTION OF THE VARIOUS METHODS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012258

PUBLICATION DATE: FEB 85

TITLE: OIL WATER SEPARATORS. 1970-FEBRUARY 1985 (CITATIONS FROM THE ENGINEERING INDEX DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *EQUIPMENT; *INDUSTRIAL WASTES; *OIL; *OIL WATER SEPARATORS; *PERFORMANCE EVALUATION; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 118P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-855450/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE UTILIZATION OF OIL-WATER SEPARATORS IN THE MARINE, MANUFACTURING, AND PETROCHEMICAL INDUSTRIES. GRAVITY SEPARATORS, COALESCERS, FILTERS, AND FLOTATION UNITS ARE AMONG THE EQUIPMENT TYPES CONSIDERED. DESIGN CONSIDERATIONS, AND SYSTEM DESCRIPTIONS AND EVALUATIONS ARE PRESENTED. UTILIZATION OF A VARIETY OF DEVICES IN OIL SPILL CLEAN UP OPERATIONS IS DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 170 CITATIONS, 12 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012259

PUBLICATION DATE: JAN 85

TITLE: OIL WATER SEPARATORS. 1973-AUGUST 1984 (CITATIONS FROM THE AMERICAN PETROLEUM INSTITUTE DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *EQUIPMENT; *INDUSTRIAL WASTES; *OIL; *OIL WATER SEPARATORS; *PERFORMANCE EVALUATION; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 230P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-800019/WEP

ABSTRACT: CITATIONS COVER RESEARCH ON THESE DEVICES PRIMARILY FOR OIL POLLUTION CONTROL. EQUIPMENT STUDIED INCLUDES COALESCERS, FILTERS, SKIMMERS, SCRUBBERS, ABSORBERS, CENTRIFUGES, AND SWEEPS. OIL RECOVERY FROM OIL SPILLS, SEPARATION FROM BILGE AND BALLAST WATER, AND REMOVAL FROM PETROLEUM REFINERY EFFLUENTS ARE DESCRIBED. THE OPERATION, TESTING, AND PERFORMANCE OF THIS EQUIPMENT IN THE LABORATORY AND IN THE FIELD ARE REPORTED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 213 CITATIONS, 17 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285

PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012261

PUBLICATION DATE: 84

TITLE: DOCUMENTATION OF A SAS PROGRAM TO CALCULATE WATER QUALITY INDICES.

PERSONAL AUTHOR: OLSON, R. J.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *MONITORING; *SAS; *STATISTICS; *WATER QUALITY; *WATER QUALITY INDICES

DESCRIPTIVE NOTE: 38P. PRICE CODE: PC A03/MF A01. ORDER NO.: DE85003542/WEP

ABSTRACT: THE WATER QUALITY INDEX (WQI) PROGRAM CALCULATES USE-IMPAIRMENT VALUES AT WATER QUALITY MONITORING STATIONS TO EXPRESS THE RELATIVE QUALITY OF SURFACE WATER WITHIN A REGION. THE METHOD, AS INITIALLY DEVELOPED BY EPA REGION VIII STAFF, CALCULATES AN AGGREGATED NUMERIC INDEX BASED ON THE EXCEEDANCE OF MONITORING DATA FOR SEVERAL PARAMETERS OVER ESTABLISHED CRITERIA VALUES OR WATER QUALITY STANDARDS. THE WQI PROGRAM ENTAILS RETRIEVING DATA FROM THE EPA STORET SYSTEM, PROCESSING THE DATA WITH SAS PROGRAMS, AND MAPPING THE WQI VALUES. THE REPORT DESCRIBES THE PROCESSING STEPS, DOCUMENTS THE SAS PROGRAMS, AND DISCUSSES CONCERNS IN ACQUIRING INPUT DATA AND INTERPRETING RESULTS. 1 FIGURE.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012262

PUBLICATION DATE: 84

TITLE: TRACE METALS ANALYSIS OF WASTEWATER BY ATOMIC ABSORPTION SPECTROSCOPY.

PERSONAL AUTHOR: TOWNS, T. G.; FRANICH, K. L.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ATOMIC ABSORPTION SPECTROSCOPY; *LABORATORY PROCEDURES; *METALS; *OPERATIONS (WASTEWATER); *TRACE METALS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 45P. PRICE CODE: PC A03/MF A01. ORDER NO.: AD-A149 181/0/WEP

ABSTRACT: THE PRIMARY PROJECT OBJECTIVES OF UPGRADING EFFLUENT TRACE METALS ANALYSIS BY ATOMIC ABSORPTION SPECTROSCOPY (AA), PROVIDING ADVANCED AA INSTRUCTION, AND MODELING A SCHEDULE FOR QUALITY CONTROL DATA IN THE ANALYSES HAVE BEEN SUCCESSFULLY COMPLETED. THE UPGRADED AND AUTOMATED SYSTEM WILL MEET THE NEEDS OF WASTEWATER ANALYSIS IN AN ACCURATE AND EFFICIENT MANNER THAT YIELDS A HIGH LEVEL OF CONFIDENCE.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285

PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012264

PUBLICATION DATE: 84

TITLE: BEFORE THE WELL RUNS DRY, VOLUME I.

DESCRIPTOR: *CONSERVATION; *HANDBOOKS; *MANAGEMENT; *PLANNING; *PUBLIC PARTICIPATION; *WATER CONSERVATION; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: 104P. $16.50 MEMBER PRICE. $21.00 NONMEMBER PRICE

ABSTRACT: THIS 104-PAGE HANDBOOK WILL HELP: (1) IDENTIFY CONSERVATION PROBLEMS; (2) ESTABLISH CONSERVATION GOALS; (3) ASSESS THE POTENTIAL OF SUPPLY MANAGEMENT; AND (4) DESIGN THE SPECIFICS OF A WATER CONSERVATION PROGRAM.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION, COMPUTER SERVICES DEPARTMENT, 6666 WEST QUINCY AVENUE, DENVER, CO 80235

IRIS ACCESSION NUMBER: EW012274

TITLE: EFFECTIVE WRITING FOR ENGINEERS, MANAGERS, SCIENTISTS.

PERSONAL AUTHOR: TICHY, H. J.

DESCRIPTOR: *COMMUNICATION; *ENGINEERS; *LANGUAGE; *MANAGERS; *SCIENTISTS; *WRITING

DESCRIPTIVE NOTE: 337P. $25.95

ABSTRACT: THIS PUBLICATION PROVIDES GUIDANCE FOR TECHNICAL WRITING TASKS. GUIDES ARE INCLUDED FOR GRAMMAR, STYLE, ORGANIZING, OUTLINING, ERRORS TO AVOID, AND WAYS TO IMPROVE WRITING.

AVAILABILITY: WILEY PROFESSIONAL BOOKS-BY-MAIL, P.O. BOX 063, SOMERSET, NJ 08873

IRIS ACCESSION NUMBER: EW012275

PUBLICATION DATE: 84

TITLE: HUMAN RESOURCES DEVELOPMENT HANDBOOK. GUIDELINES FOR MINISTRIES AND AGENCIES RESPONSIBLE FOR WATER SUPPLY AND SANITATION.

PERSONAL AUTHOR: CAREFOOT, NEIL, ED.; GIBSON, HOWARD, ED.

DESCRIPTOR: *DEVELOPING COUNTRIES; *GUIDELINES; *HUMAN RESOURCE DEVELOPMENT; MANPOWER PLANNING; MANAGEMENT; POSTSECONDARY EDUCATION; PROGRAM DEVELOPMENT; PLANNING; *SANITATION; *TRAINING; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: 230P.

ABSTRACT: THIS FOUR-CHAPTER HANDBOOK IS DESIGNED TO: (1) CLARIFY HUMAN RESOURCES DEVELOPMENT (HRD) CONCEPTS IN CURRENT USE; (2) SHOW HOW THESE CONCEPTS CAN BE APPLIED TO ORGANIZATIONS OPERATING IN WATER SUPPLY AND SANITATION; AND (3) GUIDE WATER SUPPLY AND SANITATION AGENCIES/MINISTRIES TOWARD A MORE SYSTEMATIC APPROACH TO HRD. CHAPTER 1 PROVIDES AN OVERALL PERSPECTIVE OF HRD BY DISCUSSING: HRD AS PROCESS WHICH INVOLVES PLANNING, TRAINING, AND MANAGEMENT; THE HRD APPRAISAL AND PLANNING GUIDE; THE DUAL-FOCUS APPROACH; AND THE SYSTEMATIC APPROACH TO TRAINING. CHAPTER 2 PRESENTS AN 11-STEP FRAMEWORK MANPOWER PLANNING ACCOMPANIED BY A SET OF SAMPLE WORKSHEETS TO FACILITATE THE ACTUAL PREPARATION OF A MANPOWER DEVELOPMENT PLAN. CHAPTER 3 DESCRIBES THE SEVEN STEPS NEEDED TO PREPARE AN ANNUAL TRAINING AND DEVELOPMENT PLAN AND THE SEVEN STEPS NEEDED TO DEVELOP AND IMPLEMENT A TRAINING PROGRAM. THE LATTER SEVEN STEPS INCLUDE DETERMINING TRAINING NEEDS, ANALYZING TASKS, DEVELOPING CURRICULA, PREPARING ENVIRONMENTAL SUPPORT, CONDUCTING TRAINING, FOLLOWING UP TRAINING, AND EVALUATING/ADJUSTING TRAINING. GUIDELINES FOR FORMULATING TRAINING PROGRAMS FOR COMMUNITY-BASED WORKERS TO PROMOTE WATER SUPPLY AND SANITATION ARE INCLUDED. CHAPTER 4 ADDRESSES SUCH MANAGEMENT ISSUES AS PERSONNEL PLANNING, EMPLOYEE RELATIONS, EMPLOYMENT, EMPLOYEE SERVICES, WAGES/SALARIES, PERFORMANCE APPRAISAL, CAREER DEVELOPMENT, TRAINING AND DEVELOPMENT, AND SAFETY AND HEALTH.

AVAILABILITY: WORLD HEALTH ORGANIZATION, 1211 GENEVA 27, SWITZERLAND

IRIS ACCESSION NUMBER: EW012342

PUBLICATION DATE: 85

TITLE: ACID MINE DRAINAGE. OCTOBER 1978-MARCH 1985 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ACID MINE DRAINAGE; *ANNOTATED BIBLIOGRAPHIES; *ANALYTICAL TECHNIQUES; BIBLIOGRAPHIES; *LABORATORY PROCEDURES; INDUSTRIAL WASTES; MINES; *FIELD STUDIES; *WATER QUALITY; *WATER RESOURCES

DESCRIPTIVE NOTE: 143P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-856797/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING LABORATORY AND FIELD ANALYSES OF ACID MINE DRAINAGE. TOPICS INCLUDE SITE INVESTIGATIONS AND CHARACTERIZATION, RENOVATION AND MONITORING PROGRAMS, CONTAMINANT TREATMENT RESEARCH, AND CONTROL AND ABATEMENT STUDIES. CHEMICAL ANALYSES OF AFFECTED AREAS, AND TERRESTRIAL AND AQUATIC ECOSYSTEMS RESPONSE EVALUATIONS ARE ALSO DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 144 CITATIONS, 30 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012343

PUBLICATION DATE: 83

TITLE: SAND FILTRATION. 1970-MARCH 1985 (CITATIONS FROM POLLUTION ABSTRACTS).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *DRINKING WATER; *FILTRATION; OPERATIONS (WATER); OPERATIONS (WASTEWATER); *SAND FILTRATION; *WASTEWATER TREATMENT; *WATER TREATMENT

DESCRIPTIVE NOTE: 69P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-856771/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE USE OF SAND FILTRATION FOR WATER AND WASTEWATER PURIFICATION. DESIGNING AND MATHEMATICAL MODELING OF SAND FILTERS, AS WELL AS THEIR USE IN SEWAGE TREATMENT, IS DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 92 CITATIONS, 14 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012344

PUBLICATION DATE: 83

TITLE: LITERATURE REVIEW FOR DEVELOPMENT OF THE MASTER ANALYTICAL SCHEME FOR ORGANIC COMPOUNDS IN WATER.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHEMICALS; *LABORATORY PROCEDURES; *LITERATURE REVIEWS; *ORGANIC COMPOUNDS; *RESEARCH REVIEWS; *WATER; *WATER QUALITY

DESCRIPTIVE NOTE: 340P. PRICE CODE: PC A15/MF A01. ORDER NO.: PB85-132874/WEP

ABSTRACT: A STATE-OF-THE-ART REVIEW WAS PREPARED COVERING ANALYSIS OF ORGANICS IN DRINKING WATER AND SURFACE WATERS AND IN WATERS FROM INDUSTRIAL, MUNICIPAL, AND ENERGY SOURCES. THE AREAS REVIEWED INCLUDED: (1) SAMPLING, (2) TECHNIQUES FOR COMPONENT ISOLATION AND/OR CONCENTRATION, (3) EXTRACT FRACTIONATION, (4) CHEMICAL DERIVATIZATION, (5) GAS CHROMATOGRAPHY, (6) GAS CHROMATOGRAPHY/MASS SPECTROMETRY/COMPUTER TECHNIQUES, AND (7) QUALITY CONTROL/QUALITY ASSURANCE. THE INITIAL REVIEW WAS CONSIDERED A PREREQUISITE FOR EXPERIMENTAL DEVELOPMENT OF THE EPA'S MASTER ANALYTICAL SCHEME FOR ORGANICS IN WATER. IT HAS BEEN UPDATED TO INCLUDE THE APPROPRIATE LITERATURE THROUGH JUNE 1982.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012345

PUBLICATION DATE: 84

TITLE: USER'S GUIDE FOR CSIN: CHEMICAL SUBSTANCES INFORMATION NETWORK.

DESCRIPTOR: COMPUTER APPLICATIONS; *CHEMICALS; *CSIN; *CHEMICAL SUBSTANCES INFORMATION NETWORK; INFORMATION DISSEMINATION; INFORMATION SOURCES; INFORMATION NETWORKS; *DATABASES; *ENVIRONMENT; *USER GUIDES; *TOXIC SUBSTANCES; *WATER

DESCRIPTIVE NOTE: 319P. PRICE CODE: PC A14/MF A01. ORDER NO.: PB85-170041/WEP

ABSTRACT: THE CHEMICAL SUBSTANCES INFORMATION NETWORK (CSIN) IS A COMPUTER INTERFACE THAT PROVIDES A GATEWAY TO FACILITATE SEARCHING AND RETRIEVING BIBLIOGRAPHIC AND FACTUAL DATA FROM A LARGE SELECTION OF ONLINE DATABASES MAINTAINED BY DIALOG, SDC, NLM, BRS, OHS. CAS AND CIS. THE EMPHASIS IS ON CHEMICAL AND HYDROLOGIC INFORMATION. A SERIES OF MENUS LEAD THE USER THROUGH SETTING UP SEARCHES. LISTS OF KEYWORDS, WHICH ARE TAILORED TO SPECIFIC DATABASES, PROVIDE SEARCH TERMS ON SELECTED TOPICS. THIS DOCUMENT IS THE COMPLETE USER'S REFERENCE MANUAL FOR THE PROTOTYPE CSIN IMPLEMENTED ON A VAX 11/780 MINI-COMPUTER. IT INCLUDES DESCRIPTIONS AND EXAMPLES OF ALL SYSTEM FEATURES, TUTORIALS ON SEARCHING AND USE OF THE EDITOR, AND INTRODUCTION TO ONLINE SEARCHING. THE APPENDIX CONTAINS THE CONTENTS OF THE 28 LISTS OF KEYWORDS ON TOPICS RELATED TO THE ENVIRONMENTAL AND TOXIC HEALTH EFFECTS OF CHEMICALS, DISTRIBUTION OF WATER IN THE GROUND AND ENVIRONMENT, AND MATHEMATICAL ANALYSIS AND MODELING.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012346

PUBLICATION DATE: 85

TITLE: REFERENCE METHOD FOR DETECTING 'GIARDIA' CYSTS IN WATER.

PERSONAL AUTHOR: JAKUBOWSKI, W.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *DRINKING WATER; *GIARDIA; *LABORATORY PROCEDURES; *PUBLIC HEALTH; *REFERENCE METHODS; *WATER QUALITY

DESCRIPTIVE NOTE: 10P. PRICE CODE: PC A02/MF A01. ORDER NO.: PB85-163277/WEP

ABSTRACT: GIARDIA DETECTION METHODOLOGY FOR WATER SAMPLES IS RELATIVELY NEW, HAVING BEEN IN EXISTENCE FOR LESS THAN 10 YEARS. CURRENT METHODOLOGY IS BASED UPON MICROSCOPIC EXAMINATION OF CONCENTRATES FROM LARGE VOLUME WATER SAMPLES. THIS PROCEDURE IS TEDIOUS AND TIME-CONSUMING AND IT FAILS TO PROVIDE IMPORTANT INFORMATION ON THE VIABILITY OF DETECTED CYSTS. THE METHOD FOR THE 16TH EDITION OF STANDARD METHODS IS DESCRIBED ALONG WITH THE APPLICATIONS AND LIMITATIONS OF THE METHODOLOGY.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PO[illegible] ROYAL ROAD, SPRINGFIELD, VA 22161

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*COLOR	(1)	EW012179
*COLORADO	(2)	EW012134 EW012144
COLORADO	(1)	EW011996
*COMMUNICATION	(1)	EW012274
*COMMUNITY EDUCATION	(1)	EW012070
*COMPLIANCE	(8)	EW011972 EW011973 EW012012 EW012030 EW012042 EW012143 EW012152 EW012187
COMPLIANCE	(1)	EW012114
*COMPOSTING	(5)	EW011957 EW012023 EW012044 EW012134 EW012150

COMPOSTING (2) EW012065 EW012151
*COMPUTER APPLICATIONS (10) EW011955 EW011961 EW011986 EW012015 EW012016 EW012045 EW012183 EW012202 EW012251 EW012261
COMPUTER APPLICATIONS (1) EW012345
*COMPUTERS (3) EW011955 EW011961 EW011986
*COMPUTER SOFTWARE (3) EW012202 EW012251 EW012261
CONCRETE (1) EW012130
*CONFERENCE PROCEEDINGS (4) EW011972 EW011974 EW011984 EW012248
*CONFLICT (1) EW011958
*CONNECTICUT (1) EW012184
*CONSERVATION (4) EW011678 EW012133 EW012145 EW012264
*CONSTRUCTION (1) EW011336
CONSTRUCTION (1) EW012153
*CONSTRUCTION CHANGE ORDERS (1) EW011336
*CONSTRUCTION PROJECTS (1) EW011336
*CONTAMINANTS (1) EW012256
*CONTAMINATION (3) EW012177 EW012249 EW012252
CONTAMINATION (1) EW012001
*CONTAMINATION VIOLATIONS (1) EW012177
*CONTRACT SERVICES (5) EW012014 EW012026 EW012027 EW012143 EW012192
*CONTROLS (1) EW012188
*CONVENTIONAL TREATMENT (1) EW012095
*CONVEYANCE METHOD (1) EW012052
*CORN (1) EW012098
*CORRESPONDENCE (1) EW011989
*COSTS (16) EW011947 EW011948 EW011974 EW011976 EW011987 EW012026 EW012045 EW012051 EW012066 EW012069 EW012093 EW012105 EW012106 EW012130 EW012143 EW012144
COSTS (5) EW012115 EW012151 EW012153 EW012225 EW012247
*COURSE CONTENT (1) EW012196
*COURSE DESIGN (1) EW012196
*CROSS CONNECTION CONTROL (1) EW012002
*CROSS-CONNECTIONS (1) EW011992
*CSIN (1) EW012345

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*CURRENT NEEDS (4) EW011988 EW011989 EW012093 EW012094
*DATABASES (2) EW012103 EW012345
*DATA COLLECTION (2) EW012015 EW012049
*DDD (1) EW011980
*DDE (1) EW011980
*DDT (1) EW011980
*DECOMPOSITION (1) EW012117
*DELAWARE (1) EW012153
*DEPTH (1) EW012053
DESALINATION (1) EW012239
*DESIGN (10) EW011951 EW011977 EW012031 EW012033 EW012052 EW012068 EW012115 EW012130 EW012135 EW012136
DESIGN (1) EW012150
*DESIGN MANUALS (1) EW011976
*DETECTION METHODS (1) EW012117
*DETENTION BASINS (1) EW011951
*DEVELOPING COUNTRIES (4) EW011968 EW012023 EW012070 EW012275
*DEVELOPMENT (1) EW011947
DEVELOPMENT (1) EW012110
DEWATERING (2) EW012065 EW012153
*DIAGNOSIS (1) EW012018
*DIFFUSERS (1) EW012034
*DIGESTERS (2) EW012130 EW012188
DIGESTION (2) EW012039 EW012065
*DIRECTORIES (1) EW012070

*DISEASE CONTROL (1) EW012253
*DISEASES (1) EW012245
*DISINFECTANTS (1) EW012243
*DISINFECTION (9) EW011978 EW011996 EW011997 EW011998 EW011999 EW012000 EW012021 EW012048 EW012148
DISINFECTION (2) EW012039 EW012065
*DISPERSION (1) EW012100

*DISSOLVED OXYGEN	(1)	EW012035
DISSOLVED OXYGEN	(1)	EW012046
DOMESTIC WASTES	(1)	EW012115
*DRAINAGE	(1)	EW012144
*DRAINAGE SYSTEMS	(1)	EW011951
*DREDGING	(1)	EW012234
*DRINKING WATER	(34)	EW011976 EW011993 EW011996 EW011997 EW011999 EW012000 EW012001 EW012017 EW012018 EW012019 EW012020 EW012021 EW012022 EW012024 EW012095 EW012104 EW012128 EW012142 EW012149 EW012176 EW012177 EW012178 EW012179 EW012180 EW012181 EW012185 EW012209 EW012218 EW012221 EW012223 EW012225 EW012245 EW012343 EW012346
DRINKING WATER	(1)	EW011998
*EADS	(1)	EW012103
*ECOLOGICAL EFFECTS	(1)	EW011980
*ECOLOGY	(2)	EW012079 EW012080
ECOLOGY	(1)	EW012217
*ECONOMICS	(11)	EW011678 EW011947 EW011949 EW012013 EW012024 EW012026 EW012105 EW012106 EW012133 EW012134 EW012192
ECONOMICS	(1)	EW012112
*ECONOMICS	(1)	EW012069
*EFFLUENT	(1)	EW012232
*EFFLUENT CONTROL	(1)	EW012114
*EFFLUENT DISTRIBUTION SYSTEMS	(1)	EW012052
*EFFLUENT LIMITATIONS	(1)	EW012255
*EFFLUENTS	(7)	EW012046 EW012051 EW012103 EW012114 EW012131 EW012152 EW012255
*ELECTROPLATING	(1)	EW011979
*EMISSIONS	(1)	EW012097
*EMISSION TRADING PROGRAMS	(1)	EW012069
*ENERGY	(3)	EW011964 EW011987 EW012122
*ENERGY CONSERVATION	(2)	EW012023 EW012122
*ENERGY PRODUCTION	(1)	EW011964
ENERGY RECOVERY	(1)	EW012065
*ENERGY SYSTEMS	(1)	EW012103
*ENFORCEMENT	(1)	EW012069
*ENGINEERING	(2)	EW011963 EW012066

*ENGINEERS (1) EW012274
*ENGLAND (1) EW012186
*ENVIRONMENT (7) EW011953 EW012023 EW012061 EW012219 EW012228 EW012246 EW012345
*ENVIRONMENTAL ANALYSIS (1) EW012119
*ENVIRONMENTAL EFFECTS (6) EW012105 EW012126 EW012127 EW012234 EW012237 EW012240
*ENVIRONMENTAL HAZARDS (1) EW012216
*ENVIRONMENTAL MODELS (1) EW012100
*EPA (1) EW011336
EPA (1) EW011981
*EPA METHOD STUDY (2) EW011969 EW011970
*EQUIPMENT (14) EW011977 EW011987 EW011992 EW012002 EW012041 EW012050 EW012101 EW012185 EW012190 EW012227 EW012234 EW012240 EW012258 EW012259
EQUIPMENT (1) EW012188
*EQUIPMENT DESCRIPTIONS (1) EW012028
*EUTROPHIC LAKES (1) EW012120
*EVALUATION (5) EW011962 EW011984 EW011985 EW012010 EW012011
EVALUATION (1) EW012183
*EVALUATION TECHNIQUES (1) EW012050
*EXPERIMENTAL FACILITIES (1) EW012136
*FACILITIES (20) EW011973 EW011974 EW011988 EW011989 EW012012 EW012013 EW012014 EW012066 EW012093 EW012094 EW012129 EW012130 EW012136 EW012142 EW012146 EW012150 EW012154 EW012183 EW012192 EW012197
FACILITIES (4) EW012134 EW012188 EW012189 EW012247
*FACULTATIVE LAGOONS (2) EW012075 EW012076
*FEDERAL PROJECTS (2) EW012110 EW012111
*FEDERAL ROLE (4) EW011988 EW011989 EW012093 EW012094
*FERTILIZER (1) EW012098
FERTILIZER (1) EW012134
*FIELD STUDIES (2) EW012097 EW012342
*FILAMENTOUS BACTERIA (1) EW012038
*FILAMENTOUS ORGANISMS (1) EW012035
*FILTER BEDS (1) EW012135
*FILTER MEDIA (1) EW012031
*FILTERS (5) EW012022 EW012031 EW012073 EW012085 EW012086

FILTERS (1) EW012074
*FILTRATION (9) EW012019 EW012020 EW012021 EW012051 EW012095 EW012178 EW012180 EW012185 EW012343
FILTRATION (1) EW012104
*FINANCIAL OBLIGATIONS (1) EW011973
*FINANCING (4) EW011988 EW011989 EW012026 EW012093
*FIRE SPRINKLER SYSTEMS (2) EW011992 EW012002
FLAVOR PROFILE METHOD (1) EW012176
FLOCCULATION (1) EW012104
*FLOCULANTS (1) EW012180
*FLOODING (1) EW012147
*FLOODS (1) EW011949
FLOW MEASUREMENT (1) EW012039
*FLUORIDE (1) EW011976
FOOD CHAINS (1) EW012217
*FORMALDEHYDE (1) EW012242
*FUNDING (6) EW011988 EW011989 EW012013 EW012093 EW012144 EW012192
*FUTURE NEEDS (4) EW011988 EW011989 EW012093 EW012094
*GASIFICATION PROCESS (1) EW012106
*GIARDIA (3) EW012019 EW012020 EW012346
*GIARDIA LAMBLIA (1) EW012104
*GIARDIASIS (1) EW012018
*GOVERNMENT PUBLICATIONS (1) EW012219
*GOVERNMENT ROLE (1) EW011956
*GREAT LAKES (1) EW012111
GRIT REMOVAL (1) EW012039
*GROUNDWATER (8) EW012001 EW012049 EW012050 EW012101 EW012118 EW012184 EW012249 EW012252
*GUIDELINES (1) EW012275
GUIDELINES (2) EW012182 EW012255
*GUIDES (2) EW011336 EW012251
*HALIDES (1) EW012096
*HALOGENATED ORGANIC COMPOUNDS (2) EW012126 EW012127

*HALOGENS	(1)	EW012149
*HANDBOOKS	(2)	EW012197 EW012264
*HAZARD ASSESSMENT	(1)	EW012125
*HAZARDOUS MATERIALS	(3)	EW011972 EW012028 EW012101
HAZARDOUS MATERIALS	(1)	EW012218
*HAZARDOUS WASTES	(3)	EW011972 EW011973 EW012099
*HEALTH	(6)	EW011957 EW011982 EW011983 EW012126 EW012127 EW012246
HEALTH	(1)	EW012245
*HEALTH EFFECTS	(1)	EW012061
*HEALTH HAZARDS	(1)	EW012242
*HEAT	(1)	EW012037
*HEAVY METALS	(3)	EW012098 EW012099 EW012217
*HIGHER EDUCATION	(1)	EW012196
*HOME TREATMENT	(1)	EW012022
*HOSPITALS	(1)	EW011987
HUMAN DISEASES	(1)	EW012253
*HUMAN RESOURCE DEVELOPMENT	(1)	EW012275
*HUMIC ACIDS	(1)	EW012179
HYDROELECTRIC POWER	(1)	EW012186
*HYDROGEN SULFIDE	(1)	EW012191
HYDROGEN SULFIDE	(1)	EW012146
*HYDROLOGICAL SYSTEMS	(1)	EW012112
*HYDROLOGY	(3)	EW012049 EW012112 EW012230
*ILLINOIS	(3)	EW012016 EW012047 EW012129
*INCENTIVES	(1)	EW012145
INDEXES	(1)	EW011954
*INDICATOR ORGANISMS	(2)	EW012021 EW012223
*INDICATORS	(1)	EW012149
*INDIVIDUAL CHANGE	(1)	EW012029
*INDUSTRIAL WASTES	(16)	EW011972 EW011977 EW011979 EW011982 EW011983 EW011991 EW012037 EW012048 EW012103 EW012105 EW012121 EW012124 EW012233 EW012248 EW012258 EW012259
INDUSTRIAL WASTES	(2)	EW012113 EW012342

*INDUSTRIES (4) EW011678 EW011979 EW011982 EW011983

*INDUSTRY (2) EW011953 EW012248

INDUSTRY (2) EW012242 EW012250

*INFILTRATION (2) EW011984 EW011985

*INFLOW (2) EW011984 EW011985

*INFORMATION DISSEMINATION (1) EW012219

INFORMATION DISSEMINATION (2) EW011954 EW012345

INFORMATION NETWORKS (1) EW012345

*INFORMATION SERVICES (1) EW012219

*INFORMATION SOURCES (1) EW012219

INFORMATION SOURCES (1) EW012345

*INFORMATION SYSTEMS (1) EW012183

*INORGANIC ANALYSIS (1) EW012155

INORGANIC CHEMICALS (1) EW012255

INORGANIC COMPOUNDS (1) EW012155

*INSTRUCTION (2) EW012011 EW012196

*INSTRUCTIONAL MATERIALS (22) EW011954 EW012071 EW012072 EW012073 EW012075 EW012076 EW012077 EW012078 EW012079 EW012080 EW012081 EW012082 EW012083 EW012084 EW012085 EW012086 EW012087 EW012088 EW012089 EW012090 EW012091 EW012196

INSTRUCTIONAL MATERIALS (2) EW012074 EW012092

*INSTRUCTOR'S GUIDES (9) EW012071 EW012076 EW012077 EW012080 EW012082 EW012083 EW012086 EW012087 EW012090

INSTRUCTOR'S GUIDES (2) EW012074 EW012092

*ION EXCHANGE (2) EW012238 EW012239

*KINETICS (1) EW012035

*KLEBSIELLA (1) EW012221

*LABORATORY FACILITIES (1) EW011955

*LABORATORY PROCEDURES (22) EW011969 EW012080 EW012081 EW012085 EW012086 EW012089 EW012090 EW012091 EW012096 EW012099 EW012149 EW012204 EW012220 EW012222 EW012226 EW012227 EW012246 EW012257 EW012262 EW012342 EW012344 EW012346

LABORATORY PROCEDURES (13) EW012071 EW012072 EW012073 EW012074 EW012075 EW012077 EW012078 EW012079 EW012082 EW012083 EW012084 EW012092 EW012155

*LABORATORY STUDIES (1) EW012207

*LABORATORY STUDY (1) EW011970

*LAGOONS (6) EW011977 EW012075 EW012076 EW012077 EW012078 EW012131

*LAKE MANAGEMENT DISTRICT	(1)	EW011967
*LAKES	(2)	EW011967 EW012120
*LAND APPLICATION	(1)	EW012153
LAND APPLICATION	(1)	EW012151
*LAND DISPOSAL	(2)	EW012197 EW012202
LAND DISPOSAL	(1)	EW012065
*LANDSCAPING	(1)	EW012145
*LAND USE	(2)	EW011949 EW011981
*LANGUAGE	(1)	EW012274
*LATERALS	(1)	EW011985
*LATERAL TESTS	(1)	EW011985
*LEAKS	(1)	EW011985
*LEARNING	(2)	EW012010 EW012029
*LEARNING SKILLS	(1)	EW012010
*LEARNING STRATEGIES	(1)	EW012010
*LEDS	(1)	EW012193
*LEGAL ISSUES	(1)	EW012042
*LIABILITY	(1)	EW012042
*LICENSES	(1)	EW011963
*LIFT STATIONS	(3)	EW012129 EW012147 EW012189
*LITERATURE REVIEWS	(5)	EW012099 EW012148 EW012155 EW012207 EW012344
*LOCAL ROLE	(3)	EW011988 EW011989 EW012094
*MAINS	(1)	EW011948
*MAINTENANCE	(20)	EW011948 EW011976 EW011984 EW011985 EW011987 EW012014 EW012016 EW012027 EW012039 EW012041 EW012066 EW012087 EW012088 EW012102 EW012115 EW012143 EW012147 EW012185 EW012189 EW012197
MAINTENANCE	(3)	EW011996 EW012040 EW012153
*MANAGEMENT	(27)	EW011336 EW011678 EW011951 EW011953 EW011956 EW011958 EW011959 EW011960 EW011961 EW011962 EW011967 EW011968 EW011972 EW011974 EW011986 EW011987 EW011997 EW012014 EW012024 EW012026 EW012027 EW012042 EW012045 EW012144 EW012182 EW012183 EW012264
MANAGEMENT	(3)	EW011996 EW012247 EW012275
*MANAGERS	(2)	EW012182 EW012274
MANPOWER PLANNING	(1)	EW012275
*MANUALS	(1)	EW011976

MANUALS	(1)	EW012115
MARINE ENVIRONMENT	(1)	EW012217
*MARINE PLANTS	(1)	EW012217
*MARINE POLLUTION	(2)	EW012110 EW012111
*MARYLAND	(1)	EW012150
*MASS BALANCE	(1)	EW012132
*MEASUREMENT	(2)	EW012068 EW012119
*MEMBRANES	(1)	EW011993
*MEMBRANE SEPARATION PROCESSES	(1)	EW011993
*METAL RECOVERY	(3)	EW012121 EW012124 EW012233
*METALS	(9)	EW011979 EW012061 EW012099 EW012121 EW012124 EW012217 EW012233 EW012257 EW012262
METHANE	(3)	EW012122 EW012146 EW012151
*MICHIGAN	(1)	EW012187
*MICROBIOLOGY	(8)	EW012079 EW012080 EW012089 EW012090 EW012091 EW012209 EW012221 EW012223
MICROBIOLOGY	(7)	EW012073 EW012074 EW012075 EW012076 EW012077 EW012078 EW012092
MINES	(1)	EW012342
*MINING	(1)	EW012230
MINNESOTA	(1)	EW011966
*MODELS	(12)	EW011947 EW011950 EW011951 EW011964 EW011965 EW011966 EW012032 EW012045 EW012100 EW012112 EW012154 EW012251
*MOLLUSCS	(2)	EW012237 EW012241
*MONITORING	(10)	EW011973 EW011985 EW011986 EW012037 EW012042 EW012049 EW012050 EW012118 EW012230 EW012261
MONITORING	(3)	EW011996 EW012110 EW012241
*MULTI-OBJECTIVE ANALYSIS	(1)	EW011965
*MUNICIPALITIES	(1)	EW012015
*MUSSELS	(2)	EW012237 EW012241
*NATIONWIDE URBAN RUNOFF PROGRAM	(1)	EW012247
*NATO	(1)	EW012209
*NATURAL RESOURCES	(6)	EW011678 EW011953 EW011968 EW012023 EW012186 EW012219
*NEEDS ASSESSMENT	(1)	EW011959
*NEW MEXICO	(1)	EW012184

*NEW YORK (1) EW012017
NEW YORK (2) EW012043 EW012225
*NITRATES (1) EW012017
*NITROGEN (1) EW012032
*NITROGEN REMOVAL (1) EW012032
*NONPOINT SOURCE CONTROL (1) EW012064
*NONPOINT SOURCE POLLUTION (1) EW011966
*NPDES (1) EW012152
*NPDES PERMITS (1) EW012042
*NUTRIENT LOADING (1) EW012120
*OCCUPATIONAL HAZARDS (1) EW012216
*OCCUPATIONAL SAFETY (1) EW011957
*OCEAN DISPOSAL (1) EW012232
*OCEANS (2) EW012111 EW012232
*ODOR (1) EW012022
*ODORS (3) EW012146 EW012176 EW012191
*OIL (5) EW011982 EW011983 EW012240 EW012258 EW012259
*OIL SPILLS (1) EW012240
*OIL WATER SEPARATORS (2) EW012258 EW012259
*OKLAHOMA (1) EW012027
*ONSITE SEWAGE DISPOSAL (1) EW012052
*ONSITE WASTEWATER DISPOSAL (1) EW012053
*OPERATIONS (SOLID WASTES) (1) EW011678
*OPERATIONS (WASTEWATER) (78) EW011954 EW011977 EW011988 EW011989 EW011991 EW012012 EW012013
EW012014 EW012025 EW012026 EW012027 EW012030 EW012031 EW012033 EW012034
EW012035 EW012036 EW012037 EW012038 EW012039 EW012041 EW012043 EW012045
EW012046 EW012051 EW012065 EW012066 EW012071 EW012072 EW012073 EW012074
EW012075 EW012076 EW012077 EW012078 EW012079 EW012080 EW012081 EW012082
EW012083 EW012084 EW012085 EW012086 EW012087 EW012088 EW012089 EW012090
EW012091 EW012092 EW012093 EW012094 EW012097 EW012102 EW012113 EW012115
EW012129 EW012130 EW012131 EW012132 EW012133 EW012134 EW012135 EW012136
EW012143 EW012146 EW012147 EW012150 EW012151 EW012153 EW012154 EW012188
EW012189 EW012191 EW012193 EW012194 EW012197 EW012224 EW012262
OPERATIONS (WASTEWATER) (3) EW012040 EW012187 EW012343
*OPERATIONS (WATER) (29) EW011954 EW011976 EW011986 EW011993 EW011996 EW011997 EW011998
EW011999 EW012000 EW012001 EW012013 EW012014 EW012016 EW012019 EW012020
EW012021 EW012024 EW012095 EW012164 EW012128 EW012142 EW012176 EW012178
EW012179 EW012180 EW012181 EW012185 EW012221 EW012223

OPERATIONS (WATER) (2) EW012225 EW012343
*OPERATOR TRAINING (2) EW011987 EW012094
OREGON (1) EW011678
*ORGANIC ANALYSIS (1) EW012155
*ORGANIC COMPOUNDS (5) EW012126 EW012127 EW012204 EW012246 EW012344
ORGANIC COMPOUNDS (1) EW012155
*ORGANIC HALIDES (2) EW012096 EW012149
*ORGANICS (1) EW012132
ORGANICS (1) EW012046
*ORGANIZATIONAL CHANGE (1) EW012029
*ORGANIZATIONS (1) EW012070
*OVERLAND FLOW (1) EW012154
*OXIDATION DITCHES (2) EW012091 EW012092
OXIDATION DITCHES (1) EW012039
*OXYGEN (2) EW012191 EW012250
*OXYGEN DIFFUSION SYSTEMS (1) EW012012
*OXYGEN TRANSFER (1) EW012034
*OZONATION (1) EW012046
*OZONE (2) EW011978 EW012250
*PAPER INDUSTRY (1) EW012250
PAPER INDUSTRY (1) EW012048
*PAPERMILLS (1) EW012048
PATHOGENS (1) EW012209
*PERCOLATED WASTEWATER (1) EW012053
*PERFORMANCE EVALUATION (39) EW011959 EW011960 EW011962 EW011988 EW011989 EW011999 EW012019
EW012020 EW012027 EW012034 EW012038 EW012043 EW012044 EW012046 EW012047
EW012051 EW012066 EW012094 EW012096 EW012101 EW012102 EW012104 EW012106
EW012134 EW012136 EW012150 EW012154 EW012178 EW012179 EW012180 EW012181
EW012189 EW012190 EW012207 EW012222 EW012225 EW012253 EW012258 EW012259
PERFORMANCE EVALUATION (1) EW012187
*PERFORMANCE STANDARDS (1) EW012255
*PERMIT APPLICATIONS (1) EW011973
PERMIT LIMITS (1) EW012114
*PERMITS (3) EW011973 EW012069 EW012152

*PERSONNEL (4) EW011958 EW012025 EW012143 EW012182
*PESTICIDES (5) EW011980 EW012064 EW012116 EW012206 EW012228
PESTICIDES (2) EW012126 EW012127
*PETROCHEMICALS (2) EW011982 EW011983
PH (1) EW012046
*PHOSPHORUS (1) EW012187
*PHOSPHORUS REMOVAL (1) EW012036
*PHTHALATE ESTERS (1) EW011969
PILOT PLANTS (1) EW012134
*PIPES (2) EW011948 EW011992
*PLANNING (23) EW011947 EW011949 EW011950 EW011951 EW011962 EW011964 EW011965 EW011967 EW011968 EW011973 EW011974 EW011981 EW012011 EW012024 EW012045 EW012093 EW012133 EW012144 EW012183 EW012186 EW012249 EW012252 EW012264
PLANNING (1) EW012275
PLANTS (1) EW011968
*POINT-OF-USE (1) EW012022
*POINT SOURCE POLLUTION (1) EW012255
*POLICIES (11) EW011949 EW011950 EW011956 EW011998 EW012024 EW012068 EW012069 EW012184 EW012196 EW012249 EW012252
*POLICY STUDIES (1) EW012196
*POLITICAL SCIENCE (1) EW011949
*POLLUTANTS (2) EW011969 EW011970
*POLLUTION (7) EW012190 EW012110 EW012111 EW012201 EW012226 EW012227 EW012253
*POLLUTION CONTROL (8) EW011966 EW011967 EW011973 EW011979 EW011980 EW011982 EW011983 EW012064
*POLYALUMINUM CHLORIDE (1) EW012181
*POLYCHLORINATED BIPHENYLS (1) EW012117
*POLYELECTROLYTES (1) EW012130
*POLYMERS (2) EW012178 EW012180
*POLYVINYL CHLORIDE (1) EW012229
PONDS (1) EW012115
*POND SYSTEMS (1) EW012115
*POSTSECONDARY EDUCATION (21) EW012071 EW012072 EW012073 EW012074 EW012075 EW012076 EW012077 EW012078 EW012079 EW012080 EW012082 EW012083 EW012084 EW012085 EW012086 EW012087 EW012088 EW012089 EW012090 EW012091 EW012092

POSTSECONDARY EDUCATION	(3)	EW011954	EW012081	EW012275		
*PREDICTION	(2)	EW012097	EW012132			
PRELIMINARY TREATMENT	(1)	EW012039				
*PRESSURIZED SYSTEMS	(1)	EW012052				
*PRETREATMENT	(2)	EW012065	EW012255			
*PREVENTIVE MAINTENANCE	(1)	EW012189				
*PRIVATIZATION	(3)	EW012013	EW012027	EW012192		
*PROCESS CONTROL	(3)	EW012037	EW012044	EW012193		
*PROCESS CONTROLS	(1)	EW012194				
*PRODUCT INFORMATION	(1)	EW012116				
*PRODUCTIVITY	(1)	EW012182				
*PROFESSIONAL ENGINEERS	(1)	EW011963				
PROGRAM DEVELOPMENT	(1)	EW012275				
*PROGRAM IMPROVEMENT	(1)	EW011959				
*PROJECT ANALYSIS	(1)	EW011965				
*PROJECT DESCRIPTIONS	(4)	EW012100	EW012110	EW012111	EW012186	
PROJECT REPORT	(1)	EW011988				
*PROTOCOLS	(1)	EW012204				
PUBLICATIONS	(1)	EW012219				
PUBLIC EDUCATION	(1)	EW012177				
*PUBLIC HEALTH	(5)	EW012017	EW012018	EW012061	EW012245	EW012346
PUBLIC HEALTH	(1)	EW012218				
*PUBLIC NOTIFICATION	(1)	EW012177				
*PUBLIC PARTICIPATION	(3)	EW012017	EW012070	EW012264		
PUBLIC PARTICIPATION	(1)	EW012177				
*PUBLIC POLICY	(1)	EW012068				
*PUBLIC WORKS	(1)	EW012183				
*PULP INDUSTRY	(1)	EW012250				
PULP INDUSTRY	(1)	EW012048				
*PUMPS	(1)	EW012129				
PUMPS	(1)	EW012147				
*RADIATION	(1)	EW012292				

*RADIOACTIVE SUBSTANCES (1) EW012202
*RATES (1) EW011947
*RATE STRUCTURES (1) EW011947
*RCRA (1) EW011973
*RECLAIMED WATER (1) EW012133
*RECOMMENDATIONS (5) EW011949 EW011956 EW012030 EW012069 EW012094
*RECORDS (1) EW012041
*RECORD SYSTEMS (1) EW012041
RECREATION (1) EW012186
*RECYCLING (9) EW011678 EW012023 EW012105 EW012113 EW012121 EW012122 EW012124
EW012133 EW012233
*REFERENCE METHODS (1) EW012346
*REGISTRATION (2) EW011963 EW012206
*REGULATIONS (12) EW011336 EW011963 EW011973 EW011998 EW012030 EW012069 EW012118
EW012142 EW012177 EW012184 EW012187 EW012228
REGULATIONS (1) EW012255
*REGULATORY AGENCIES (1) EW012030
*REHABILITATION (4) EW011948 EW011984 EW011985 EW012102
*REPORTS (6) EW011981 EW011989 EW012094 EW012110 EW012111 EW012125
*REREGISTRATION (1) EW012206
*RESEARCH (4) EW011956 EW012048 EW012128 EW012248
RESEARCH (1) EW012110
*RESEARCH METHODS (1) EW012068
RESEARCH METHODS (1) EW011968
*RESEARCH NEEDS (2) EW011949 EW012248
*RESEARCH PRIORITIES (1) EW012125
*RESEARCH REPORTS (25) EW011957 EW011978 EW012000 EW012034 EW012053 EW012061 EW012095
EW012096 EW012098 EW012101 EW012104 EW012120 EW012124 EW012126 EW012127
EW012180 EW012201 EW012224 EW012229 EW012236 EW012237 EW012241 EW012242
EW012247 EW012256
*RESEARCH REVIEWS (3) EW012155 EW012218 EW012344
*RESEARCH USE (1) EW011949
RESERVOIRS (1) EW012186
*RESINS (2) EW012238 EW012239
*RESOURCE ALLOCATION (1) EW011964

*RESOURCE INVENTORIES	(1)	EW011968			
*RESPIRATION RATE	(1)	EW012194			
*RETROFITTING	(2)	EW012012	EW012129		
*REVENUES	(1)	EW011950			
*RISK ASSESSMENT	(2)	EW012061	EW012202		
*ROTATING BIOLOGICAL CONTACTORS	(2)	EW012087	EW012088		
*RURAL AREAS	(1)	EW012225			
RURAL AREAS	(1)	EW012115			
*SAFETY	(1)	EW011957			
*SAMPLING	(4)	EW012042	EW012047	EW012050	EW012103
SAMPLING	(2)	EW012155	EW012242		
*SAND FILTRATION	(2)	EW012019	EW012343		
*SANITATION	(2)	EW012070	EW012275		
*SAS	(1)	EW012261			
SCIENCES	(1)	EW012219			
*SCIENTISTS	(1)	EW012274			
*SECONDARY EMISSIONS	(1)	EW012097			
SEDIMENTATION	(1)	EW012039			
*SEDIMENTATION	(1)	EW012020			
*SEDIMENTS	(2)	EW012117	EW012256		
*SEPTAGE	(1)	EW012197			
*SEPTIC TANKS	(1)	EW012102			
*SETTLERS	(1)	EW012136			
*SEWAGE	(3)	EW012052	EW012197	EW012232	
*SEWAGE DISPOSAL	(1)	EW012052			
*SEWAGE SLUDGE	(4)	EW012065	EW012098	EW012106	EW012224
*SEWER MAINTENANCE	(1)	EW012040			
*SEWERS	(3)	EW011984	EW011985	EW012147	
SEWERS	(1)	EW012040			
*SHELLFISH	(1)	EW012217			
*SILAGE	(1)	EW012098			
*SIMULATIONS	(2)	EW011950	EW011966		

*SITE REHABILITATION (1) EW012230
*SITE STUDIES (1) EW012117
*SKILL DEVELOPMENT (2) EW011959 EW012010
*SKILL TRANSFER (2) EW011959 EW011960
*SLUDGE (33) EW011957 EW012043 EW012044 EW012046 EW012065 EW012071 EW012072 EW012075 EW012076 EW012079 EW012080 EW012081 EW012082 EW012083 EW012084 EW012085 EW012086 EW012089 EW012090 EW012091 EW012092 EW012098 EW012106 EW012132 EW012134 EW012151 EW012153 EW012190 EW012193 EW012194 EW012207 EW012224 EW012232
SLUDGE (1) EW012150
*SLUDGE BULKING (1) EW012135
*SLUDGE COMPOSTING (1) EW012150
*SLUDGE DISPOSAL (1) EW012151
*SLUDGE REDUCTION (1) EW012043
*SLUDGE STABILITY (1) EW012207
SMALL COMMUNITIES (1) EW012115
*SOCIOLOGY (1) EW011949
*SOIL (2) EW011953 EW012053
*SOIL ABSORPTION SYSTEMS (1) EW012102
*SOIL POLLUTION (1) EW012227
*SOILS (2) EW012101 EW012117
SOILS (1) EW011968
*SOLID WASTES (6) EW011678 EW012023 EW012071 EW012072 EW012106 EW012122
SOLVENTS (2) EW012126 EW012127
*SOUTH CAROLINA (1) EW012154
*SPECTROPHOTOMETRY (1) EW012257
*SPILL CLEAN UP (1) EW012101
*SPILL PROTECTION (1) EW012101
*SPILLS (1) EW012028
*SPILL SITES (1) EW012101
*SPREADERS (1) EW012190
*SPRINKLER SYSTEMS (2) EW011992 EW012002
*STABILIZATION PONDS (2) EW012032 EW012131
*STAFF DEVELOPMENT (1) EW011958

*STANDARD REFERENCE MATERIALS (1) EW012119
*STANDARDS (3) EW012209 EW012246 EW012255
*STATE PROGRAMS (1) EW011950
*STATE REGULATIONS (1) EW011998
*STATE ROLE (6) EW011988 EW011989 EW012093 EW012094 EW012184 EW012187
*STATISTICS (2) EW012068 EW012261
STEEL (1) EW012130
*STORM WATER (1) EW012050
*STORMWATER (3) EW011951 EW012144 EW012247
*STORMWATER UTILITIES (1) EW012144
*STREAMS (1) EW012047
*STRIP MINING (1) EW012230
*STRUCTURE ACTIVITY RELATIONSHIPS (1) EW012125
*SULFIDES (1) EW012191
SULFUR DIOXIDE (1) EW012146
*SUPERVISION (1) EW011958
*SURFACE RUNOFF (3) EW011966 EW012144 EW012247
SURFACE RUNOFF (1) EW012050
*SURVEYS (8) EW011968 EW011998 EW012017 EW012023 EW012070 EW012093 EW012177 EW012216
SURVEYS (1) EW012024
*SUSPENDED SOLIDS (1) EW012131
*SYNFUELS (1) EW012248
*TASTE (1) EW012022
*TASTES (1) EW012176
*TEACHING GUIDES (11) EW012071 EW012074 EW012076 EW012077 EW012080 EW012082 EW012083 EW012086 EW012087 EW012090 EW012092
*TEACHING METHODS (1) EW012196
*TECHNOLOGY (13) EW011976 EW011984 EW011991 EW012024 EW012026 EW012051 EW012105 EW012113 EW012128 EW012197 EW012201 EW012234 EW012255
TECHNOLOGY (4) EW011954 EW012209 EW012219 EW012225
*TECHNOLOGY TRANSFER (1) EW011949
*TEMPERATURE EFFECTS (2) EW012039 EW012040
*TESTS (1) EW011963

*TEXAS	(1)	EW012183
*TEXTILES	(1)	EW012105
*THICKENERS	(1)	EW012033
*THM	(2)	EW012095 EW012148
*THMS	(1)	EW011997
*TOXICITY	(2)	EW012114 EW012224
*TOXICITY TESTS	(1)	EW012114
*TOXIC MATERIALS	(1)	EW012222
*TOXICOLOGY	(1)	EW012229
*TOXIC SUBSTANCES	(19)	EW011972 EW011973 EW012028 EW012100 EW012116 EW012126 EW012127 EW012152 EW012201 EW012206 EW012216 EW012218 EW012228 EW012229 EW012236 EW012242 EW012246 EW012251 EW012345
*TRACE ELEMENTS	(2)	EW012226 EW012227
*TRACE METALS	(1)	EW012262
*TRAINING	(34)	EW011956 EW011958 EW011959 EW011960 EW011961 EW011962 EW012010 EW012011 EW012025 EW012029 EW012071 EW012072 EW012073 EW012074 EW012075 EW012076 EW012077 EW012078 EW012079 EW012080 EW012081 EW012082 EW012083 EW012084 EW012085 EW012086 EW012087 EW012088 EW012089 EW012090 EW012091 EW012092 EW012094 EW012275
*TRAINING NEEDS'	(1)	EW012025
*TRAINING PROGRAMS	(1)	EW012011
*TRANSFER OF LEARNING	(1)	EW012029
*TRENDS	(4)	EW011981 EW012128 EW012142 EW012187
*TRICKLING FILTERS	(2)	EW012073 EW012074
*TRIHALOMETHANE	(1)	EW012095
*TRIHALOMETHANES	(1)	EW012148
*ULTRAFILTRATION	(1)	EW011993
*UNIT PROCESSES	(15)	EW012039 EW012072 EW012073 EW012074 EW012075 EW012076 EW012077 EW012078 EW012084 EW012083 EW012086 EW012089 EW012090 EW012091 EW012128
UNIT PROCESSES	(1)	EW012083
*URBAN AREAS	(2)	EW012050 EW012247
*USEPA	(10)	EW011336 EW011973 EW011984 EW011988 EW011989 EW012069 EW012094 EW012103 EW012152 EW012255
USEPA	(3)	EW011969 EW011970 EW011981
*USER GUIDES	(1)	EW012345
*USER MANUALS	(1)	EW012202

*UTILITIES	(3)	EW011974 EW012015 EW012183
*UV/SEDIMENTATION PROCESS	(1)	EW012131
*VACUUM CLEANERS	(1)	EW012185
*VALUE ENGINEERING	(1)	EW012066
*VALUES	(1)	EW011992
*VALVES	(1)	EW012002
*VINYL CHLORIDE	(1)	EW012229
*VOC EMISSIONS	(1)	EW012097
*WASHINGTON	(2)	EW012104 EW012190
*WASHINGTON, D.C.	(1)	EW012247
*WASTE DISPOSAL	(39)	EW011678 EW011953 EW011973 EW011982 EW011983 EW012023 EW012028 EW012044 EW012049 EW012065 EW012071 EW012072 EW012073 EW012074 EW012075 EW012076 EW012077 EW012078 EW012081 EW012082 EW012083 EW012084 EW012085 EW012086 EW012087 EW012088 EW012089 EW012090 EW012091 EW012092 EW012098 EW012106 EW012134 EW012151 EW012153 EW012190 EW012197 EW012202 EW012232
WASTE DISPOSAL	(3)	EW011954 EW012079 EW012080
*WASTE MANAGEMENT	(1)	EW011972
*WASTEPAPER	(1)	EW012106
*WASTE PROCESSING	(2)	EW011982 EW011983
*WASTES	(2)	EW012222 EW012233
*WASTE SITES	(1)	EW012049
*WASTE TREATMENT	(4)	EW011953 EW011972 EW011979 EW012239
*WASTEWATER	(6)	EW011954 EW012096 EW012155 EW012233 EW012248 EW012257
*WASTEWATER COLLECTION	(3)	EW011984 EW011985 EW012147
*WASTEWATER DISCHARGES	(1)	EW012103
*WASTEWATER TREATMENT	(103)	EW011336 EW011954 EW011957 EW011969 EW011970 EW011977 EW011978 EW011988 EW011989 EW011991 EW012012 EW012013 EW012014 EW012025 EW012026 EW012027 EW012030 EW012031 EW012032 EW012033 EW012034 EW012035 EW012036 EW012037 EW012038 EW012039 EW012040 EW012041 EW012042 EW012043 EW012044 EW012045 EW012046 EW012048 EW012051 EW012052 EW012053 EW012065 EW012066 EW012071 EW012072 EW012073 EW012074 EW012075 EW012076 EW012077 EW012078 EW012079 EW012080 EW012081 EW012082 EW012083 EW012084 EW012085 EW012086 EW012087 EW012088 EW012089 EW012090 EW012091 EW012092 EW012093 EW012094 EW012097 EW012102 EW012103 EW012105 EW012113 EW012115 EW012118 EW012121 EW012124 EW012129 EW012130 EW012131 EW012132 EW012133 EW012134 EW012135 EW012136 EW012143 EW012146 EW012148 EW012153 EW012154 EW012183 EW012188 EW012189 EW012191 EW012192 EW012193 EW012194 EW012197 EW012247 EW012216 EW012224 EW012232 EW012238 EW012243 EW012248 EW012255 EW012262 EW012343
WASTEWATER TREATMENT	(5)	EW012147 EW012150 EW012151 EW012187 EW012190
*WASTOX	(1)	EW012251

*WATER (5) EW012155 EW012204 EW012257 EW012344 EW012345

WATER (2) EW011934 EW011968

*WATERBORNE DISEASES (1) EW012245

*WATER CONSERVATION (4) EW012102 EW012133 EW012145 EW012264

*WATER DISTRIBUTION (2) EW011948 EW012209

WATER DISTRIBUTION (1) EW012218

*WATER EXTRACTIONS (1) EW012050

*WATER MAINS (1) EW011948

*WATER PIPES (2) EW011992 EW012002

*WATER POLLUTION (4) EW011981 EW012217 EW012220 EW012227

WATER POLLUTION (1) EW011954

*WATER POLLUTION CONTROL (18) EW011936 EW011966 EW011984 EW011985 EW012028 EW012049 EW012064
EW012100 EW012110 EW012111 EW012152 EW012184 EW012222 EW012230 EW012247
EW012248 EW012258 EW012259

WATER POLLUTION CONTROL (1) EW012069

*WATER PROJECTS (1) EW011950

*WATER QUALITY (51) EW011336 EW011954 EW011956 EW011966 EW011967 EW012001 EW012016
EW012017 EW012018 EW012021 EW012022 EW012028 EW012030 EW012042 EW012047
EW012048 EW012049 EW012050 EW012053 EW012064 EW012093 EW012102 EW012110
EW012111 EW012112 EW012114 EW012118 EW012120 EW012142 EW012148 EW012149
EW012152 EW012184 EW012187 EW012230 EW012232 EW012234 EW012237 EW012240
EW012241 EW012243 EW012245 EW012249 EW012250 EW012252 EW012253 EW012256
EW012261 EW012342 EW012344 EW012346

WATER QUALITY (2) EW011996 EW012247

*WATER QUALITY INDICES (1) EW012261

*WATER RECYCLING (1) EW012105

*WATER RESOURCE PROJECTS (1) EW011965

*WATER RESOURCES (18) EW011947 EW011950 EW011953 EW011954 EW011964 EW011965 EW011967
EW012001 EW012112 EW012133 EW012145 EW012184 EW012186 EW012249 EW012252
EW012264 EW012275 EW012342

WATER RESOURCES (1) EW011996

*WATER REUSE (1) EW012103

*WATERSHEDS (2) EW011951 EW011966

WATERSHEDS (1) EW012247

*WATER SUPPLY (9) EW011947 EW011950 EW011974 EW012022 EW012070 EW012186 EW012225
EW012264 EW012275

*WATER SYSTEMS (1) EW011987

*WATER TREATMENT (49) EW011336 EW011947 EW011954 EW011969 EW011970 EW011974 EW011976

EW011978 EW011986 EW011987 EW011993 EW011996 EW011997 EW011998 EW011999
EW012000 EW012001 EW012013 EW012014 EW012018 EW012019 EW012020 EW012021
EW012022 EW012024 EW012095 EW012104 EW012128 EW012142 EW012148 EW012149
EW012176 EW012177 EW012178 EW012179 EW012180 EW012181 EW012183 EW012185
EW012209 EW012221 EW012223 EW012225 EW012238 EW012239 EW012243 EW012245
EW012253 EW012343

WATER TREATMENT (1) EW012218

*WATER USE (2) EW012105 EW012145

*WATER UTILITIES (1) EW011974

*WELL WATER (1) EW012245

WILDLIFE (1) EW011968

*WISCONSIN (2) EW011967 EW012040

*WOOD PRESERVATIVES (1) EW012028

*WORK ORDERS (1) EW012189

*WORKSHOPS (2) EW012125 EW012152

*WORKSTATIONS (1) EW011955

*WPCF (2) EW011956 EW012030

*WPCF COMMITTEE REPORTS (1) EW012030

*WRITING (1) EW012274